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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF CRIMINAL ENFORCEMENT, FORENSICS AND TRAINING NATIONAL ENFORCEMENT INVESTIGATIONS CENTER P.O. BOX 25227, DENVER FEDERAL CENTER DENVER, COLORADO 80225

January 27, 2004

FAXED and HAND DELIVERED

Mr. M.W. Rivet, Manager, Environmental, Health and Safety Formosa Plastics Corporation, Texas 201 Formosa Drive P.O. Box 700 Point Comfort, Texas 77978

Re: Multimedia Compliance Investigation at Formosa Plastic Corporation, Texas (FPC TX), Point Comfort, Texas

Dear Mr. Rivet:

The U.S. Environmental Protection Agency (EPA) National Enforcement Investigations Center (NEIC), will conduct a multimedia inspection of Formosa's Point Comfort facility beginning February 2, 2004. The inspection and this document review request are authorized pursuant to EPA regulations and Federal environmental statutes, including but not limited to:

- Section 114 (a) of the Clean Air Act, 42 U.S.C. § 7414 (a),
- Section 308 (a) of the Clean Water Act, 33 U.S.C. § 1318 (a),
- Section 3007 (a) and 9005 (a) of the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6927 (a) and 6991 (a),
- Section 104 (e) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9604 (e),

The purpose of the inspection is to determine compliance with applicable environmental statutes, regulations, rules, decrees, approvals, and permits. A list of records and documents needed by our EPA inspectors is enclosed. We believe that many of these records are, or should be, readily available at your facility.

You may, if you desire, assert a confidentiality claim covering part of or all of the information requested, pursuant to 40 C.F.R. § 2.203(b), by attaching to such information, at the time it is submitted, a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as "trade secret" or "proprietary" or "company confidential." Information covered by such a claim will be disclosed by EPA only to the extent, and only by means of the procedures set forth in the regulations at 40 C.F.R. Part 2 Subpart B. If no such claim accompanies

the information when it is received by EPA, it may be made available to the public by EPA without further notice to you. <u>In any event, you should read the above cited regulations carefully before asserting a business confidentiality claim, since certain categories of information are not properly the subject of such a claim.</u>

If you have questions about this inspection, please contact Martha Hamre, NEIC project leader at (303) 462-9271.

We thank you in advance for your cooperation.

Sincerely,

Diana A. Love, Esq.

Director, NEIC

Enclosure

cc: Mark Hansen, U.S. EPA Region 6

Himanshu Vyas, U.S. EPA Region 6

FORMOSA PLASTICS CORPORATION – POINT COMFORT, TEXAS NEIC RECORDS/DOCUMENTS REQUEST

GENERAL PROCEDURE

During the multi-media compliance investigation at Formosa, EPA inspectors will be reviewing records kept for your facility. In order to expedite this portion of the investigation, EPA is providing you advanced notification of the records that will likely be reviewed on-site. For most documents, EPA will review the records on-site and request copies, as needed. In certain cases, document copies will be requested for later review at EPA.

In preparation for this multi-media compliance investigation, EPA has divided this record and document request into two portions. The first section consists of documents that EPA would like available and copies prepared (as noted) on February 2, 2004. The second section consists of general and media specific documents that will probably be reviewed by EPA inspectors. Other documents may also be requested that are not listed. During the investigation, EPA will work with Formosa to develop a schedule to review these documents.

PART 1 - Please have these documents available on February 2, 2004

- 1. Description of all process areas including process flow diagrams (10 Copies).
- 2. Site Map of the facility (10 Copies).
- 3. Management organization chart (including environmental department). (1 Copy)
- 4. State Emission Inventory Reports for 2000, 2001, and 2002, including detailed speciated emission calculations for each emission point (1 copy).
- 5. Most recent Title V application.
- 6. Identification of all process units subject to NSPS, NESHAP, or MACT requirements.
- 7. Provide all permits and/variances for emission sources and any related correspondence.
- 8. Most recent Notice of Registration (NOR) filed with TCEQ. (1 Copy)
- 9. Solid waste and hazardous waste determinations, and any waste analysis data used to support these determinations.
- 10. Annual and/or biennial hazardous waste reports for the past 3 years.
- 11. Summary of parameters being analyzed for by on-site and/or off-site laboratories including a sampling schedule.
- 12. NPDES/State discharge permit(s) effective during the last 3 years, including any separate storm water permits.
- 13. Description of all wastewater treatment systems, including schematic diagrams and any process changes since submittal of the NPDES/pretreatment permit application.
- 14. Water balance diagram (2 copies)
- 15. Plans and/or written descriptions of the sewer system (including by-pass capability), monitoring stations, and outfall locations. Include process, sanitary, and storm water sewers.
- 14. Form Rs used for notification of toxic releases for the last 3 years
- 15. Documentation used to complete Form Rs for the last 3 years (If computer generated, provide description of calculation methods)

PART 2- Documents likely to be requested by NEIC inspectors (Schedule to be determined)

General

- 1. Provide brief descriptions for all process areas including the following information:
 - a. Simplified process flow diagrams
 - b. Material balances
 - c. Pollution control equipment
 - d. Raw materials used and annual usage.
 - e. Products made
 - f. Vessel cleaning procedures
- 2. Management organizational chart (including environmental department)

- 3. List of on-site laboratories and types of analyses conducted.
- 4. Inventory of chemicals and quantities purchased during the last 2 years and list of products.
- 5. Enforcement Actions/Notices of Violations (NOVs)
- 6. Consent Decrees/Orders/Agreements and related correspondences.
- 7. List of all process unit shut-downs that have occurred during the last 3 years, including starting and ending dates/times.
- 8. Internal incident reports (sometimes just a form) for all plant incidents which may have impacted the environment in the last 3 years.

Clean Air Act (CAA)

- 1. Provide all Title V applications submitted to the Texas Commission on Environmental Quality (TCEQ) or Environmental Protection Agency.
- 2. Provide all construction and operation applications. Provide all permits issued under these applications. (From 1990)
- 3. Provide all excess emissions reports to regulatory agencies from the last 3 years.
- 4. Provide all reports for the off-site, FTIR ambient air analyzer submitted to regulatory agencies from the last 3 years. Provide all electronically logged data from the analyzer from 2003 and year-to-date 2004.
- 5. Provide the dates of initial construction and modifications, notifications of completed construction, and dates of initial operation, for all process units.
- 6. Provide any requests for variances or exemptions to permitted or regulatory requirements and all related correspondences. For any variances or exemptions granted, provide the written documentation from the regulatory agency. (From 1990)
- 7. Provide a list of continuous emission monitors. Include the following information:
 - a. Emission point and associated process unit (i.e. process vent, boiler, etc.)
 - b. Pollutant(s) monitored (i.e. carbon monoxide, nitrogen oxide, opacity, etc.)
 - c. Approximate installation date
- 8. Provide all stack test protocols, stack test reports, or any other documents describing any tests done, methods used, pollutants tested, test data, calculations, test results, and process data. Include all tests done by the company, consultants, or regulatory agencies.
- 9. Under 40 CFR Part 63 Subparts F,G, & H, (HON), provide the following records:
 - a. Initial Notification
 - b. Notification of Compliance Status
 - c. Semi-annual compliance status reports
 - d. Startup, shutdown, and malfunction plan(s)
 - e. All group determinations and supporting documentation (i.e. TRE calculations, stack test reports, wastewater testing, process knowledge, etc.)
- 10. Under 40 CFR Part 61, Subpart FF
 - a. Initial TAB report and all annual TAB reports
 - b. Analytical results from all sampling conducted
 - c. Process or block flow diagrams for subject wastewater streams
- 11. Provide the following information for storage tanks:
 - a. Content
 - b. Rated capacity

- c. Installation date
- d. Annual throughput
- e. Type of seals installed or control strategy
- f. Tank inspection dates, records, and repair documentation.
- g. Date of last emptying and degassing.
- h. Identification of which regulation the tank is subject to. (i.e. NSPS K, Ka, Kb, HON, TCEQ regulation, etc.)
- 12. For each Furnace, boiler, and process heater provide:
 - a. Rated capacity in 10⁶ BTU/hr heat input.
 - b. Fuel type and percentage of time each fuel type is used.
 - c. Sulfur content of fuel
 - d. Type(s) of pollution control equipment (e.g., ultra low-NOx burners, bag houses, etc.) and performance efficiency(s) (design and actual if known).
 - e. Identification of stacks equipped with monitors for determining opacities, S0_x, N0_x, C0 or hydrocarbons in stack effluent, including type of monitor (CEMS, process, other) and pollutant measured.
 - f. Identify date of installation
 - g. Identify all NSPS units
- 13. Catalyst Regeneration (if applicable):
 - a. Indicate by unit all catalysts that are regenerated on site and frequency of regeneration for each catalyst
 - b. Describe where off gases go during catalyst regeneration
 - c. Indicate disposition of fines during regeneration
 - d. Indicate type(s) of collection and pollution control equipment
- 14. Under 40 CFR Part 61 Subpart F, please provide the following information:
 - a. Copies of sampling results for stack tests, reactor openings, vinyl chloride content in resin and in process wastewater.
 - b. Locations of all sampling points.
 - c. Copies of reports submitted to EPA or TCEQ.
 - d. Copies of calculations done to determine reactor opening loss.

Resource Conservation and Recovery Act (RCRA)

- 1. RCRA Part A permit applications (original and any revisions).
- Part B permits and permit applications, including any modifications, including BIF applications and modifications
- 3. Determinations, data, documents, etc., supporting the facility's decision that wastes are hazardous, non-hazardous or LDR hazardous wastes for all solid wastes, as defined under RCRA. Also provide information used in the determination of the EPA hazardous waste codes applied to all hazardous wastes.
- 4. EPA identification numbers allowing the facility to treat, store, dispose of, transport, or offer for transportation any hazardous wastes.
- 5. Manifests for any hazardous wastes transported, accepted, or offered for transportation off-site, including Land Disposal Restriction (LDR) notifications and certifications (past 3 years).
- 6. Biennial and/or annual reports for shipping any hazardous wastes off-site to a treatment, storage, or disposal facility or for treating, storing, or disposing of any hazardous wastes on site (last 3 years).
- 7. Exception reports for any manifests not received back from the designated facility (last 3 years).
- 8. Hazardous waste minimization plan

- 9. Notifications for any hazardous wastes intended to be exported.
- 10. Any notifications, precompliance and compliance certifications submitted for burning of hazardous wastes in boilers or industrial furnaces.
- 11. Waste analysis plan for treating, storing, or disposing of any hazardous wastes
- 12. Documentation of any analytical results of wastes (including wastewater) generated at the facility, including, but not limited to, TCLP toxicity testing, corrosivity testing, and testing establishing whether or not a material meets the definition of a characteristic waste, and totals analysis results for LDR determinations.
- 13. Analytical results and accumulation records for any recyclable material utilized for precious metal recovery.
- 14. Schedule and inspection logs for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are important to preventing, detecting, or responding to environmental or human health hazards.
- 15. Employee training records for hazardous waste handlers, including job titles and descriptions, name of each employee, and documentation of the type and amount of training each has received. Provide a copy of the hazardous waste training plan.
- 16. Current Contingency Plan including summary reports and documentation of incidents that required implementation of the contingency plan (past 3 years).
- 17. Methods and dates for treating, storing, or disposing of any hazardous wastes at the facility.
- 18. Location and quantity of each hazardous waste generated within the facility.
- 19. Plot plan showing locations of all less than 90 day accumulation areas and tanks. Also identify locations of all waste operation points and satellite accumulation areas.
- 20. Inspection schedules, logs/summaries for all container storage areas and <90 day accumulation areas (last 3 years).
- 21. Groundwater sampling and analysis plan for any impoundment, landfill, or land treatment facilities on-site.
- 22. Outline of groundwater quality assessment program for any impoundment, landfill, or land treatment facilities on-site.
- Groundwater analyses and reports for any impoundment, landfill, or land treatment facilities onsite.
- 24. Closure and post-closure plans for any hazardous waste disposal facilities, waste piles, surface impoundments, tanks or landfills.
- 25. Certifications for any hazardous waste disposal facilities, waste piles, surface impoundments, tanks or landfills that have been closed.
- 26. Post-closure plans for any hazardous waste disposal facilities, waste piles, surface impoundments, tanks or landfills.
- 27. Certifications for any post-closure care that has been completed on any hazardous waste disposal facilities, waste piles, surface impoundments, tanks or landfills
- 28. Certified assessment of integrity for any existing tank systems used for storing or treating hazardous waste that do not have secondary containment.

- 29. Certified assessment of design and construction for any new tank systems used for storing or treating hazardous waste.
- 30. Certified statements for any tank systems used for storing or treating hazardous waste that have been repaired.
- 31. Inspection schedules, logs/summaries for all tank systems, surface impoundments, and waste piles used for storing or treating hazardous waste (last 3 years).
- 32. Notifications and reports of any hazardous waste releases to the environment.
- 33. Analyses of any hazardous wastes being incinerated or thermally treated in a device other than enclosed devices
- 34. Analyses of any hazardous wastes being treated by chemical, physical, or biological methods in other than tanks, surface impoundments, or land treatment facilities
- 35. Inspection schedules, logs/summaries for all thermal, chemical, physical, or biological treatment areas (other than tanks, surface impoundments, or land treatment facilities).
- 36. Certification of program which reduces the volume and toxicity of hazardous waste
- 37. List of units, and supporting documentation, that are subject to Subpart AA. This applies to process vents associated with distillation, fractionation; thin-film evaporation, solvent extraction, or air/steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw.
- 38. List of units, and supporting documentation, that are subject to Subpart BB. This applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight.
- 39. List of units, and supporting documentation that are subject to Subpart CC. This applies to tanks, containers, and surface impoundments that treat, store, or dispose of hazardous waste that contain a volatile organic concentration of more than 500 ppmw.
- 40. Analyses and any leak detection records to document compliance with Subparts AA, BB, and CC.
- 41. Analyses or other information showing that used oil that is burned for energy recovery meets the specifications for used oil fuel
- 42. Records of each shipment of used oil to a used oil burner (last 3 years)
- 43. EPA identification number for all transporters of used oil used in the past 2 years

Clean Water Act (CWA)

- 1. NPDES/State discharge permit(s) effective during the last 3 years, including any separate storm water permit(s).
- 2. Current NPDES/State discharge permit(s) application(s) including industrial, sanitary, pretreatment, and storm water. Also provide information on changes in process waste streams since permit application submittal.
- 3. Exceptions/exemptions/variances/appeals/modifications from current NPDES permit requirements.
- 4. All reports/plans required by NPDES/State discharge permit(s) including, but not limited to: best management plans (BMPs), water quality impact assessments, toxicity studies, sludge management, spill plans, storm water pollution prevention plans, etc.
- 5. All plans and/or written descriptions of the sewer system (including by-pass capability), monitoring stations, and outfall locations. Include process, sanitary, and storm water sewers.

- 6. Description of all wastewater treatment systems, including schematic diagrams and any process changes since submittal of the NPDES/pretreatment permit application.
- 7. All WWTP operation and maintenance plans, manuals, and logbooks.
- 8. Written calibration procedures and records for flow measuring and recording equipment (industrial, storm, sanitary discharges) or continuous monitors (i.e. pH) used for compliance reporting purposes
- 9. Written sampling/preservation/chain of custody procedures for all self-monitoring data collected.
- 10. Discharge monitoring reports (DMRs) for the last three years.
- 11. Any correspondence regarding exceedances of discharge limitations during the last three years.
- 12. Any correspondence regarding spills, bypasses, or upsets during the last three years.
- 13. Any compliance order, schedule, penalty assessment, or other enforcement actions issued in the last three years and related correspondence.
- 14. Most recent inspection report and response.
- 15. Most recent NPDES/State discharge permit fact sheet.
- 16. All pretreatment and/or sewer use ordinances and permits.

Comprehensive Environmental Response Compensation and Liability Act (CERCLA)/Emergency Planning and Community Right-to-know Act (EPCRA) [Please prepare 1 copy of the EPCRA documents 6 and 7 listed below for NEIC to take from facility].

- 1. Identify all releases of all hazardous substances at the facility for the last three years. For <u>each</u> release provide a separate answer the following questions (A-F).
 - A. Identify each chemical by describing:
 - a. precise chemical name/Chemical Abstract Substance (CAS) number
 - b. trade name/synonyms
 - c. RCRA code
 - d. Whether solid, liquid, or gas
 - B. Specify the quantity of each chemical released (in pounds only), and its concentration by % weight; indicate how that quantity was determined including any calculations, estimations or assumptions relied upon in making your conclusions. Identify any equipment or records relied upon in making your determination including any valves, gauges, scales, meters, production charts or log books.
 - C. Specify the date and time each release began and ended by month, day and year on a 24-hour clock
 - D. Describe what initiated each release
 - E. Describe the end effects of each release such as a spill, vapor release, explosion and/or fire.
 - F. Provide all documents reflecting notification of, or communication with "911", Local Emergency Planning Committee (LEPC), State Emergency Response Commission (SERC), National Response Center (NRC), and/or other local authorities regarding each release. Identify the date and time of each notification and communication.
- 2. Designated facility emergency coordinator
- 3. Written follow-up emergency release notifications

- 4. Provide all documentation reflecting the initial and any subsequent submissions of Material Safety Data Sheets (MSDS) or lists of MSDSs to the SERC, LEPC and local Fire Department
- 5. Provide documentation reflecting the annual submission of chemical emergency planning and inventory information (i.e., Tier II information) for the calendar years 1999, 2000, 2001, and 2002 (if available) to the SERC, LEPC, and local Fire Department
- 6. Form As and Rs used for notification of toxic releases for the last 3 years
- 7. Documentation used to complete Form Rs for the last 3 years (If computer generated, provide description of calculation methods)
- 8. Designation of each EPCRA Section 313 chemical and chemical compound as to use at the facility (import, manufacture, process and/or otherwise use)
- 9. Threshold calculations for EPCRA Section 313 chemicals and chemical compounds for reporting years 1999 to 2002.

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KELLY HART & HALLMAN LLP

ATTORNEYS AT LAW

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October 20, 2006

CONFIDENTIAL FOR SETTLEMENT PURPOSES ONLY

VIA HAND DELIVERY

Marcia Moncrieffe, Esq.
Office of Regional Counsel (6RC-EW)
U.S. EPA, Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re:

Submittal of Additional Information on Clean Air Act Issues at Formosa Plastics

Corporation Facility in Point Comfort, Texas

Dear Marcia:

As requested in earlier fact-finding discussions between EPA Region 6 and Formosa Plastics Corporation, Texas, attached is a notebook containing additional information on some of the alleged Clean Air Act violations. Specifically, this notebook contains supporting information on Items 29, 30 and 31 on the Point Comfort facility's list, as referenced in our "Summary of Action Items/Results" from our May 1, 2006 meeting in Dallas.

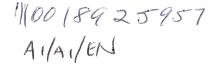
Sincerely,

Cynthia C. Smiley

Attachment

PECENVE Od.20 (M)







Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

Fax: 361-987-2363

RECEIVE

NOV 1 0 2008

Air/Texics & Inspection Coordination Branch 6ÉN-A

November 7, 2008

Certified Mail: 7007 1490 0004 3442 0861

Ms. Jennifer Gibbs
Toxics Enforcement Section (6EN-AT)
Compliance Assurance and Enforcement Division
US EPA - Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re:

Clean Air Act Section 114 Information Request

Formosa Plastics Corporation, Point Comfort Facility

Dear Ms. Gibbs:

Enclosed is the response to the Clean Air Act Section 114 Information Request, received October 8, 2008. This submission is a consolidated response from all the Formosa Plastics Corporation, Point Comfort facilities.

The response is complete to the best of our knowledge and belief for the questions regarding CFCs and the Leak Detection and Repair Program. All supporting records that were necessary to address each question are also included. The flaring information will be compiled and sent out to you by November 22, 2008, as authorized by EPA's extension notification.

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the CAA, and 18 USC §§ 1001 and 1341.



If you have any questions, please contact Stephanie Schmidt by email at StephanieSchmidt@ftpc.fpcusa.com or by telephone at (361)987-8073.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Enclosure

RECEIVE

FORMOSA PLASTICS CORPORATION POINT COMFORT FACILITY

NOV 1 0 ZUUD

Air/Texics & Inspection Coordination Branch 6EN-A

Flaring

Note: An extension was granted by USEPA for the response to questions regarding flaring. This response will be postmarked by November 22, 2008.

- 1. For each day beginning on July 1, 2005, until the date of your receipt of this Request, list the periods of time (date, start time, and end time) that combustible material was routed to each flare¹ at the Point Comfort facility (i.e., "venting periods"). This Request and all requests below seek information regarding all facility devices meeting the definition of flare set forth in footnote 1.
- 2. For each venting period listed in response to Question 1 above, provide the average heat content, in BTU/scf of the stream that was vented to each facility flare. The averaging time shall not be greater than one hour. Provide a narrative explanation and example calculations describing how you arrived at your response.
- 3. For each venting period listed in response to Question 1 above, provide the average mass flow rate of all material, combustible and non-combustible, in lb/hr, that was vented to each facility flare. The averaging time shall be no more than one hour. Provide a narrative explanation and example calculations describing how you arrived at your response.
- 4. For each venting period listed in response to Questions 1 above, provide the average rate at which steam and/or air was being added to each facility flare, in lb/hr for steam and/or scf/hr for air, at all locations on the flare (i.e., the sum of seal, upper, lower, winterizing, etc.) during each venting period. The averaging time shall not be greater than one-hour. Provide a narrative explanation and example calculations, if appropriate, describing how you arrived at your response.
- 5. For each venting period listed in response to paragraph 1 above, provide the average stream-to-vent gas or air-to-vent gas ratio (lb steam/lb vent gas or scf of air/lb of vent gas) during any release to each facility flare. The averaging time shall be no more than one hour. Provide a narrative explanation and example calculations, if appropriate, describing how you arrived as your response.
- 6. Provide an hourly average of the concentration of each constituent in the vent stream during venting periods from February 1, 2008, through the date you receive this request.
- 7. Provide a list of primary constituents in the vent stream released to each flare for venting periods since July 1, 2005, and an estimated range of each constituent's concentration. Except for the period specified in Question 6, you need not determine the exact concentration of all compounds for each period of time, but only the most prominent compounds and an approximate range of concentration.

- 8. For each facility flare, provide the minimum steam or air addition rate, in lb/hr for steam and/or scf/hr for air, at all locations on the flare (seal, upper and lower). To the extent that the minimum steam or air addition rate changes on a seasonal basis, state the minimum rate for each season and the time periods during which each season's minimum rate applies.
- 9. Provide copies of any and all documents in your possession, custody, or control that prescribe or recommend the amount of steam or air to be added to each facility flare. Provide a copy of the entire document if within the document it states the maximum steam or air rate, minimum steam or air rate, steam or air addition rate associated with a vent scenario, general steam-to-organic gas/vent gas or air-to-organic gas/vent gas ratio, or any other reference to steam addition.
- 10. For each facility flare, state with specificity which, if any, Federal and/or state regulations regulate/apply to emissions of pollutants or operational parameters at each flare. To the extent that any facility flare's emissions of pollutants or operational parameters are regulated under Federal and/or state regulations provide any documents related to such regulation, including but not limited to, applicability determinations, permits, excess emission reports, and correspondence.

CFCs

11. For the years 2003 through present, provide the name, address, and telephone number of each person, agent, or business entity from whom Formosa purchased refrigerant. Provide copies of all records, including but not limited to receipts, invoices, purchase orders, and bills of lading concerning refrigerant purchases or refrigerant acquisitions by Formosa. A list of class I and class II refrigerants can be found in Appendix F to subpart A of 40 C.F.R. Part 82.

See Tab 1 of the "Response for CFCs" binder. Yellow tabs separate sections of Question 11 response. There are 8 yellow tabs. The first yellow tab locates the invoices and bills of lading for refrigerant purchases as tracked by our accounting department. The second yellow tab locates the purchase order tracking record for refrigerant types and container sizes. The remaining yellow tabs in Tab 1 locate the refrigerant receiving records for each year 2003 to 2008.

Persons consulted: Terri Gilliland, Shirley Lin, David Hill, Mary Bachynsky, Andrew Hennessey

12. For the years 2003 through present, list the appliances that contain and use a class I or class II refrigerant in amounts greater than 50 pounds and provide the following information:

i. For each appliance, identify whether it is a commercial refrigeration appliance, industrial process refrigeration appliance, comfort cooler, or other type of refrigeration appliance;

Please see the table in Tab 2 of the "Response for CFCs" binder. All equipment is industrial process cooling equipment unless indicated otherwise.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

ii. For each appliance, state the amount of the full charge of refrigerant, the type of refrigerant used, and the date the full charge was determined; and

Please see the table in Tab 2 of the "Response for CFCs" binder. The date of full charge determinations (where known) is listed in the Plant Chillers table (far left column).

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

iii. For each appliance, provide its name, serial number, or other method of identification utilized by Formosa and/or its contractors.

Please see the table in Tab 2 of the "Response for CFCs" binder.

Persons consulted: Rick Branton, Kevin Brown, Robert Serrata, David Hill, Mary Bachynsky, Andrew Hennessey

13. For the years 2003 through present, if all or part of the maintenance, service, repair, and disposal of appliances using class I or class II refrigerant is or was contracted out, provide the name, address, and telephone number of each person, agent, or business entity contracted by Formosa for these purposes.

All work on refrigeration equipment at the Formosa Plastics Corporation, Point Comfort Facility is conducted by Formosa personnel. Work on refrigeration equipment at Formosa Hydrocarbons is conducted by Hayes Electric located at 814 W. Main St. in Port Lavaca, Texas (ph: 361-552-9538).

Persons consulted: Robert Serrata, David Hill, Mary Bachynsky, Andrew Hennessey

- 14. For the years 2003 through present, for all service and repair performed by Formosa employees or outside contractors on appliances referenced in response to Question 12 above, provide copies of all work logs, service tickets, invoices, and any other documents which include the following information:
 - i. Date service was performed;

Please see Tab 3 of the "Response for CFCs" binder; also see the blue book for Work Orders 2003-2006, and the blue book for Work Orders 2007-Present. Included are preventive maintenance and service reports.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

ii. Date each leak was discovered;

Please see Tab 3 of the "Response for CFCs" binder.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

iii. Complete, detailed description of all repair work done including the amount of refrigerant added during each repair and the amount added at the completion of the repair;

This information is on work order forms in the blue books and in Tab 3 of the "Response for CFCs" binder.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

iv. Date each repair was conducted or the reason repairs were not conducted; and

This information is on work order forms in the blue books and in Tab 3 of the "Response for CFCs" binder.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

v. Name of the technician who performed the work.

This information is on work order forms in the blue books and on the Refrigeration System Service Reports in Tab 3 of the "Response for CFCs" binder.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

15. For the years 2003 through present, for each individual appliance referenced in response to Question 12 above where repairs were conducted and an initial verification test was conducted, provide the date of the test and the specific procedures employed to conduct the test. Provide copies of test documentation maintained by Formosa.

This information is in the Refrigeration System Service Reports or the document immediately behind the service reports in Tab 3 of the "Response for CFCs" binder.

Persons consulted: Rick Branton, David Hill, Mary Bachynsky, Andrew Hennessey

16. For the years 2003 through present, for each individual appliance referenced in response to Question 12 above where repairs were conducted and a follow-up verification test was conducted, provide the date of the test and the specific procedures employed to conduct the test. Provide copies of all test documentation maintained by Formosa, for the years 2003 to present.

This information is in the Refrigeration System Service Reports or the document immediately behind the service reports in Tab 3 of the "Response for CFCs" binder.

Persons consulted: Rick Branton, David Hill, Mary Bachynsky, Andrew Hennessey

17. For the years 2003 through present, provide a summary of the dates on which refrigerant was added to each appliance and the amounts added on each of these occasions, identifying the amount of refrigerant evacuated, if applicable.

Please see Tab 4 of the "Response for CFCs" binder.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

18. State whether or not Formosa has developed any retrofit or retirement plan for leaking appliances. If so, provide a dated copy of each plan developed by Formosa.

Formosa has not developed any retrofit or retirement plan for leaking appliances. Leaking refrigeration equipment with greater than 50 lbs of refrigerant has been successfully repaired within the 30-day period after discovery since 2003.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

19. State whether or not Formosa has, since 2003, mothballed any appliance, and the reasons for that action.

See Tab 5 of the "Response for CFCs" binder for a list of mothballed /out of service refrigeration equipment.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

- 20. Since 2003, for each unit that has been converted to use an alternative refrigerant such as a refrigerant listed under the U.S. EPA's Significant New Alternatives Policy (SNAP) program provide the following information:
 - i. Type of refrigerant to which the appliance was converted;

No refrigeration units have been converted to use an alternate refrigerant since 2003.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

ii. Date of each conversion; and

No refrigeration units have been converted to use an alternate refrigerant since 2003.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

iii. Reasons for each conversion.

No refrigeration units have been converted to use an alternate refrigerant since 2003.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

21. Provide the total amount and types of class I or class II refrigerant in inventory as of the date of receipt of this letter.

Please see Tab 6 of the "Response for CFCs" binder.

R-123 \rightarrow 200 lbs R-22 \rightarrow 7,655 lbs

Persons consulted: Terri Gilliland, David Hill, Mary Bachynsky, Andrew Hennessey

22. Provide copies of any CFC certification acquisition forms for CFC recovery and recycling equipment at the facility.

Please see Tab 7 of the "Response for CFCs" binder.

Persons consulted: David Hill, Mary Bachynsky, Andrew Hennessey

23. Please identify the method of calculation chosen by Formosa to calculate its leak rate and provide an example of a calculation.

Formosa uses Method 1 for calculation of leak rate. Please see the comments section of the Refrigeration System Service Reports in Tab 3 of the "Response for CFCs" binder for an example calculation.

Persons consulted: Rick Branton, Kevin Brown, David Hill, Mary Bachynsky, Andrew Hennessey

24. Provide a copy of your Environmental Management System.

Please see Tab 8 of the "Response for CFCs" binder for the Formosa Plastics Corporation-Texas Refrigeration Compliance Procedure.

Persons consulted: David Hill, Mary Bachynsky, Andrew Hennessey

Leak Detection and Repair

25. Provide in editable electronic format, on compact disc or other electronic storage media, all data tables from the facility's LDAR records management database, for the five (5) years prior to the date of this Request. Provide the data in a format such that all information can be readily viewed in Microsoft Access (Microsoft Excel is not an acceptable format for data tables containing greater than 65,000 records).

The editable LDAR database is included on compact disc.

Persons consulted: David Hill, Anna Westbrook, Thomas Pena

26. Provide in editable electronic format, on compact disc or other electronic storage media, the gate/security records for each technician who performed LDAR monitoring at the facility for the five (5) years prior to the date of this Request. The records shall include each technician's daily entry and exit times from the plant and shall clearly indicate the technician's name and/or identification number.

Formosa is not required by regulation to maintain a record of the entry and exit times of any contract or permanent employees at the facility, therefore this information is not available in full. The records that Formosa can provide are kept on the "Formosa Contractor Log Sheet," which is completed during nights, weekends, and holidays. Any entries or exits that occur during normal business hours are not recorded. This log includes the time that the vehicle entered or exited, the name of the contractor, the name of the driver, the vehicle's license plate number, the Formosa Vehicle Pass Number, and how many passengers were in the vehicle. These records are only required to be kept for one year, but Formosa is able to provide records from September 6, 2005, to the present.

Formosa's Marine Traffic and Hydrocarbons facilities document employee entries and exits on an Accountability Log at all times. When signing in on the Accountability Log, employees are only required to list their name, so there is no identification number available. According to procedure, these records are required to be maintained for one year, therefore this is all that Formosa is able to provide.

Reference documentation for this question is included in Tabs 1, 2, 3, 4, and 5 of the "Response for Leak Detection and Repair" binders.

Persons consulted: Shane Burgin, David Hill, Jaime Tseng, Anna Westbrook, Robert Serrata, Keith Kudela, Cody Bullock, Sue Medlin, Ora Edison, Mary Bachynsky, Stephanie Schmidt

27. Provide in editable electronic format, on compact disc or other electronic storage media, for each technician who performed LDAR monitoring at the site for the five (5) years prior to the date of this Request, a listing of the technician's name, the technician's LDAR operator identification number used in the LDAR records management database, and the technician's identification number used on the gate/security records provide under Question 26 above.

Formosa does not document contract employee identification numbers. The only unique identification numbers that Formosa maintains of contract employees is each person's social security number, which can not be released due to HIPPA regulations. Formosa does, however, issue vehicle passes, which have a unique number. Formosa has provided the information that is available regarding the vehicle passes that were issued to LDAR contractors.

As stated in the response to the previous question, when an employee enters or exits while the "Formosa Contractor Log Sheet" is in use, their Formosa Vehicle Pass Number is recorded. This is the only unique identification number that Formosa has available for contractor employees.

Reference documentation for this question is included in Tabs 1, 2, 3, 4, and 5 of the "Response for Leak Detection and Repair" binders.

Persons consulted: Shane Burgin, David Hill, Jaime Tseng, Anna Westbrook, Robert Serrata, Keith Kudela, Cody Bullock, Sue Medlin, Ora Edison, Mary Bachynsky, Stephanie Schmidt



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David Harcia

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Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700

Point Comfort, TX 77978 Telephone: 361-987-7000 Fax: 361-987-2363

RECEIVE

October 10, 2008

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ar/Texics & Inspection Coordination Branch

SEN-A

Fed Ex: 8663 2424 1500

Mr. John Blevins, Director Compliance Assurance and Enforcement Division US EPA, Region 6 1445 Ross Avenue Dallas, Texas 75202-2733

Re: Clean Air Act Section 114 Information Request

Formosa Plastics Corporation, Point Comfort Facility

Dear Mr. Blevins:

Formosa Plastics Corporation-Texas (FPC-TX) received a Clean Air Act Section 114 Information Request on October 8, 2008. The deadline for return of the information requested is thirty (30) days from the date of our receipt of the letter. Because of the extensive amount of information requested, and the volume of records required to satisfy the request, FPC-TX is requesting a forty-five (45) day extension. Upon granting this extension, the deadline would be moved from November 7, 2008, to December 22, 2008.

This additional time is necessary because the request seeks information and documents from as long as five years ago and such information and documents may not be located all in one place. Our facility is quite extensive, consisting of numerous plants. Some of the requested information is controlled by SUMMIT and maintained on our network, and will take time to convert to the editable electronic format (Access) that you requested. In addition, the same resources necessary to comply with the request will be engaged in negotiations on injunctive relief with EPA and (per the government) these negotiations must be completed by October 31. Additionally, your request to convert flare "venting periods" into average heat content is normally associated with non-attainment areas and will require engineering time to develop.



We appreciate your consideration and request an expeditious resolution to this matter. If you have any questions, please contact Stephanie Schmidt at StephanieSchmidt@ftpc.fpcusa.com or by telephone at (361)987-8073.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Mr. Blevins October 10, 2008 Page 3

CC: Ms. Marcia Moncrieffe **Assistant Regional Counsel**

US EPA, Region 6 1445 Ross Avenue Dallas, Texas 75202-2733

Fed Ex: 8663 2424 1522

Fed Ex: 8663 2424 1511

Ms. Jennifer Gibbs Toxics Enforcement Section (6EN-AT) Compliance Assurance and Enforcement Division US EPA, Region 6 1445 Ross Avenue Dallas, Texas 75202-2733



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Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

Fax: 361-987-2363

October 27, 2009

RECEIVE

OCT 2 9 2009

Air/Toxics & Inspection Coordination Branch

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Certified Mail: 7007 1490 0004 3439 7293

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix D, Provision B.3 of the Decree. Specifically, a single drum of hazardous waste was stored for a few days in the less than 90-day storage area without an accumulation date marking on the drum. The drum was properly labeled with the words "Hazardous Waste." The situation was immediately corrected and the cause was determined.

Cause of Violation:

This situation was the result of an inadvertent oversight in the usual procedures for marking drums with the beginning dates of accumulation when they are full. The missing date on the drum was detected during an internal inspection of the area on October 13, 2009. The drum in question was one of three drums moved from a satellite accumulation area to the 90-day storage area on October 7, 2009, as recorded in the form prepared by the unit that generated the waste. The October 7, 2009 date was entered on the less than 90-day tracking log prepared by the unit. The two other hazardous waste drums were properly labeled and dated. All contained the same waste material from the same process area.

Remedial Actions Taken to Prevent Reoccurrence:

The accumulation date was added to the drum on October 13, 2009 -- as soon as the missing date was obtained and confirmed using the container transfer records. The cause of the noncompliance has been investigated and identified. To prevent a future noncompliance, waste





management training for containers was reviewed with the appropriate process unit personnel and all persons responsible for hazardous waste container pick-up and movement. Associated hazardous waste checklists were reviewed for completeness and effectiveness. Disciplinary actions are under evaluation for the personnel involved, and such actions will follow the site's standard progression for disciplinary matters.

Sincerely,

Randy Smith

VP/General Manager

Formosa Plastics Corporation, Texas

cc: Certified Mail: 7007 1490 0004 3439 7309
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7007 1490 0004 3439 7316 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7007 1490 0004 3439 7323 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

FAX: (512) 495-6401

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement and Compliance Assurance
Office of Criminal Enforcement, Forensics and Training

ENFORCEMENT CONFIDENTIAL

NEICVP0614E01

MULTIMEDIA COMPLIANCE INVESTIGATION

Formosa Plastics Corporation - Texas Point Comfort, Texas Project No. VP0614

April 2005

Volume 1 of 2

Project Leader: Martha Hamre

Other Contributors:
Armando Bustamante
Ken Garing
Daren Vanlerberghe
Jacquelyn Vega
Joe Wilwerding
Robert Bohn, Principal Analytical Chemist

Prepared for:

EPA Region 6 1445 Ross Avenue Dallas, Texas

Authorized for Release by:

Diana A. Love, Director

NATIONAL ENFORCEMENT INVESTIGATIONS CENTER

Denver, Colorad

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INTRODUCTION

At the request of U.S. EPA Region 6, the National Enforcement Investigations Center (NEIC) conducted a process-based multimedia compliance investigation of the Formosa Plastics Corporation, Texas plant located in Point Comfort, Texas (Formosa). Formosa is located in Calhoun County on a 1,800-acre industrial complex. There are approximately 1,600 full time employees at Formosa. Formosa (SIC Codes 2821 and 2869/NAICS Codes 325211 and 325199) consists of production facilities for the manufacture of the base and intermediate materials for plastics (olefin compounds, vinyl chloride monomer, and chlorine gas), thermoplastics (PVC, HDPE, LLDPE/LHDPE, and PP), organic chemicals (ethylene glycol), inorganic chemicals (caustics/acids), purified water, steam, and power. There are also service areas for the receipt of raw materials and the transport of product from the facility. Pollution control, waste generation, and management operations for the facility are regulated by environmental permits and regulations administered by the U.S. EPA and the Texas Commission on Environmental Quality (TCEQ).

The NEIC on-site leak detection and repair (LDAR) inspection was conducted from November 17 through 20, 2003. The NEIC on-site multimedia inspection was conducted from February 2 through 12, 2004. Findings from the LDAR inspection and multimedia inspection will be addressed in this report. Inspectors from U.S. EPA Region 6 and TCEQ participated during both on-site inspections

OBJECTIVES

Project No. VP0614

Formosa operations and associated waste streams are subject to the major environmental statutes, including the Clean Water Act (CWA), Emergency Planning and Community Right-to-Know Act (EPCRA), Resource Conservation and Recovery Act (RCRA), and Clean Air Act (CAA). Through discussions with U.S. EPA Region 6 personnel, the principal investigation objectives were to determine compliance with:

- Water pollution control regulations under the Clean Water Act, focusing on National Pollutant Discharge Elimination System (NPDES) permit compliance, wastewater treatment operations, and sampling and flow measurement procedures
- Emergency Planning and Community Right-to-Know Act (EPCRA) §§ 302, 303, 304, 311, 312, and 313 requirements, and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 103 requirements
- Hazardous waste management regulations under the Resource Conservation and Recovery Act (RCRA), focusing on identifying regulated process-generated wastes, compliance with the generator requirements (including 40 CFR Part 265 Subparts

AA, BB, and CC), and recordkeeping requirements (i.e., manifests, waste determinations, inspection records, and training), as appropriate

Clean Air Act (CAA) requirements, including benzene waste operations, leak detection and repair (LDAR) program (previous inspection), PVC MACT/vinyl chloride NESHAP, NSPS for Polymer Manufacturing, hazardous organic NESHAP (HON) for pyrolysis gasoline units, ethylene glycol manufacturing, vinyl chloride manufacturing, and ethylene dichloride manufacturing, flaring events, and a preliminary evaluation of units potentially subject to New Source Review (NSR), New Source Performance Standard (NSPS), and Prevention of Significant Deterioration (PSD) requirements. [A list of authorization for expenditures (AFE)s will be provided.]

NEIC personnel also identified facility activities/conditions that, although not specifically regulated, could potentially impact the environment.

INVESTIGATION METHODS

To meet the investigation objectives, NEIC performed the following:

- A review of federal and state regulatory files and databases
- An on-site LDAR monitoring inspection of selected volatile organic compound (VOC)/organic hazardous air pollutant (OHAP) service components conducted November 17 through 20, 2003
- An on-site inspection of the facility conducted February 2 through 12, 2004 that involved:
 - Discussions with facility personnel including detailed process reviews
 - Observation and evaluation of facility operations
 - Facility records/document review
 - Sampling of process wastes to determine compliance with regulatory limits, including waste streams to assist in compliance determination with 40 CFR Part 61 Subpart FF and RCRA waste characterization sampling
- An exit conference between regulatory and facility personnel to discuss preliminary inspection findings.

NEIC personnel stressed that final determinations will be made in conjunction with regional and state personnel.

BACKGROUND

Formosa manufactures caustic soda, pyrolysis gas, natural fuel oil, ethylene glycol, ethylene dichloride (EDC), vinyl chloride monomer (VCM), polyvinyl chloride (PVC) suspension resin, ethylene, propylene, high density polyethylene (HDPE), linear low density polyethylene (LLDPE), and polypropylene (PP). Formosa began operations in 1981 with the start-up of the and lunits. Formosa completed a major expansion in 1994 including the construction of the following units:

Formosa initiated a second expansion in 1998 that was completed in 2001/2002 including construction of a second plant, plant, and plant, which doubled the production capacity of olefins,

HDPE, and PP. Formosa has approximately 1,800 employees and is located in Calhoun County,

Point Comfort, Texas on approximately 1,600 acres [Photograph 1].

Exempt (6)(4)

Wastewater Discharges

Formosa is currently authorized under NPDES permit number TX00855701 to discharge remediated groundwater, treated process wastewater, storm water, utility wastewater, ion exchange membrane wastewater, hydrostatic test water, fire water, noncontact steam condensate, and noncontact wash waters through 14 total outfalls, including 2 internal outfalls to Lavaca Bay/Chocolate Bay, Cox Creek, Cox Creek Lake, Huisache Cove, and Cox Bay. The permit was issued on May 31, 2001 and expires on January 1, 2005.

Wastewater treatment at Formosa consists of two separate systems designated as the biological treatment facility and the physical treatment facility. The two systems are collectively designated as the CWTP. The biological treatment facility consists of degasification, equalization, precipitation, dissolved air floatation, aeration (bioreaction), clarification, fluid bed reaction, filtration, and sludge handling. Sludge handling consists of thickening, aerobic digestion, and dewatering prior to off-site landfill disposal. Excluding sludge handling, the biological treatment facility is divided into four areas designated as receiving, pretreatment, biological treatment, and tertiary treatment. The physical treatment facility consists of equalization, precipitation, clarification, and sludge handling. Sludge handling consists of thickening and dewatering prior to off-site landfill disposal. The physical treatment area has two trains, one for treatment of cooling tower blowdown, and the other for treatment of IEM unit and demineralization wastewater. Sanitary wastewater from the process area is treated onsite in a sanitary treatment package plant. The package plant consists of comminution, equalization, aeration, clarification, filtration, and chlorine disinfection. Storm water that does not come in contact with process equipment, designated as outside battery limits, is collected in ditches in the respective process units. Internal gates are located on the ditches at the perimeter of the process units. The internal gates are normally kept closed, and

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REPACTED 9-30-2005

Formusa - Paint Comfort, Texas

Photograph 1 - Formosa Plastics Corporation - Point Comfort, Texas

the general procedure is to only open the gates following confirmation that the storm water is not contaminated, based on sampling and analysis of the storm water. When the internal gates are opened, the storm water flows to the various permitted storm water outfalls located throughout the facility.

Emergency Planning and Community Right-to-Know Act (EPCRA)

Formosa has submitted Toxic Chemical Inventory Reporting Forms (Form R's and A's) for chemicals present in amounts above the threshold quantities. Formosa reported approximately 766,391 pounds (total) of 43 chemicals released from its operations during 2002. The following is a listing of the reported released/transferred chemicals from Formosa in 2000, 2001, and 2002.

- 1,1,1,2-tetrachloroethane
- 1,1,2,2-tetrachloroethane
- 1,1,2-trichloroethane
- 1,2,4-trimethylbenzene
- 1,2-dichloroethane
- 1,2-dichloroethylene
- 1,3-butadiene
- 4,4'-isopropylidenediphenol
- · acctaldehyde
- ammonia
- benzene
- carbon tetrachloride
- chlorine
- chlorobenzene
- chloroethane
- chloroform
- chloromethane
- chloroprene
- chromium
- copper
- cumene
- cyclohexane

- dichlorodifluoromethane
- dichloromethane
- dicyclopentadiene
- dioxin and compounds
- ethyl benzene
- · ethylene
- · cthylene glycol
- ethylene oxide
- ethylidene dichloride
- hexachlorobenzene
- hydrochloric acid
- methanol
- n-hexane
- naphthalene
- propylene
- propylene oxide
- styrene
- tetrachloroethylene
- · titanium tetrachloride
- toluene
- vinyl chloride
- xylene

Hazardous Waste Management

Formosa has the following three RCRA EPA ID numbers: Main plant TXT490011293 (Large Quantity Generator (LQG) – Treatment Storage and Disposal Facility (TSDF)), Shore Tank Farm TX0000888164 (Conditionally Exempt Small Quantity Generator (CESQG)), and Marine Terminal Facility TXD988088845 (Small quantity generator). Only the main plant (TXT490011293) was evaluated during the NEIC inspection.

The two most recent TCEQ compliance investigations of Formosa's main plant (EPA ID No. TXT490011293), an LQG, were conducted on November 6 and 8, 2001 and on February 2, 27, and March 6, 2003. The waste management units include two, less-than-90-day container storage areas (CSAs) for drums and seven, less-than-90-day CSAs for roll-off boxes. Due to a reclassification of their distillation bottoms, Formosa deactivated five hazardous waste tanks used to manage distillation bottoms (K019, K020) in April 2001. Two tanks have been disassembled, two tanks are pending closure, and one tank has been closed according to TRRP rules. Documentation has been submitted and is pending TCEQ approval. A used oil collection center has been obtained for authorization to temporarily store used oil that has been generated at the plant and for used oil generated by Formosa's employees at their private residences. The registration is for used oil only, no filters are collected at the site. No concerns were noted during the February/March 2003 used oil collection center inspection. Violations cited during the inspections included failure to notify the executive director for the generation and disposition of wastewater streams at the facility, container labeling issues, and failure to list their hazardous and/or non-hazardous wastewater on the Notice of Registration (NOR). There are six unauthorized surface impoundments on-site, addressed under the 3008(a) and 3008(h) orders issued by EPA in February 1991. The status of the impoundments is 'pending closure' in accordance with EPA's Corrective Action Strategy Pilot Project.

Air Emissions

Formosa is subject to several requirements under the Clean Air Act. Because Formosa is considered a major source of several air pollutants, the federal and state requirements have been compiled into several Title V permits pending or issued by TCEQ. Emission sources at the plant include, but are not limited to, reactors, dryers, heaters, boilers, and incinerators. NEIC focused on examining Formosa's compliance with the following regulations:

- 40 CFR Part 60 (Standards of Performance for New Stationary Sources or NSPS)
 Subpart A General Provisions (specifically pertaining to excess emissions and good pollution control practices)
- 40 CFR Part 60 Subpart VV Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry
- 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants or NESHAP)
 Subpart F National Emission Standard for Vinyl Chloride
- 40 CFR Part 61 Subpart V National Emission Standard for Equipment Leaks
- 40 CFR Part 61 Subpart FF National Emission Standard for Benzene Waste Operations
- 40 CFR Part 63 Subpart F National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry (or HON, specifically pertaining to startup, shutdowns, and malfunctions)
- 40 CFR Part 63 Subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks

SUMMARY OF FINDINGS

The following section summarizes areas of noncompliance and concern identified during the inspection. Areas of concern are inspection observations of potential problems that could result in environmental harm, noncompliance with permit or regulatory requirements, or are associated with pollution prevention issues.

CLEAN WATER ACT

Areas of Noncompliance

1. 40 CFR § 136.3, Table II, as referenced by NPDES Permit TX0085570, Monitoring and Reporting Requirements, 2. Test Procedures [30 TAC § 319.11(b)] - Sample containers, holding times, and preservation methods shall meet requirements specified in 40 CFR Part 136.

Most sample parameters to be analyzed under Formosa's NPDES permit are required to be preserved by cooling at 4 °C.

2. NPDES Permit TX0085570, Effluent Limitations and Monitoring Requirements – The permittee is authorized to discharge wastewater subject to the effluent limitations and monitoring requirements specified in the NPDES Permit.

Formosa exceeded permitted effluent limitations on 14 occasions from January 2001 through December 2003, as documented on Discharge Monitoring Reports (DMRs) reviewed for that time period.

3. NPDES Permit TX0085570, Effluent Limitations and Monitoring Requirements – The permittee is authorized to discharge wastewater subject to the effluent limitations and monitoring requirements specified in the NPDES Permit.

4. 40 CFR § 122.21(g)(2) — Existing dischargers applying for an NPDES permit shall provide a line drawing of the water flow through the facility with a water balance, showing operations contributing wastewater to the effluent and treatment units.

40 CFR § 122.21(g)(3) - Existing dischargers applying for an NPDES permit shall provide a narrative identification of each type of process, operation, or production area which contributes wastewater to the effluent for each outfall

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NPDES Permit TX0085570, Permit Conditions, 1. General a. – When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

Areas of Concern

A.

Exempt (6) (4)

Formosa is required to cease wastewater discharge at times when the depth of Lavaca Bay at Channel Marker 22 (near the diffuser) is less than 1 foot in depth. Formosa is required to install a staff gauge or alternative equipment "in the vicinity of Channel Marker 22" and read it daily to comply with the requirement.

B.

Chloroform effluent limitations and monitoring requirements are currently included in Formosa's NPDES permit for internal outfall 101. Internal outfall 101 regulates discharges of treated wastewater from organic chemical production processes which are covered under the Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF) effluent guidelines. Formosa's permit also includes internal outfall 201 for discharges of wastewater from inorganic chemical production processes and cooling tower blowdown. The combined effluent from outfall 101 and 201 is monitored at outfall 001, which is the total plant effluent discharge. There are no effluent limitations or monitoring requirements for chloroform at outfall 201 or 001.

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

Areas of Noncompliance

1. CERCLA § 103 [40 CFR § 302.6(a)] - Any person in charge of a vessel or an offshore or an onshore facility shall, as soon as he has knowledge of any release....in a quantity equal

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to or exceeding the reportable quantity determined by this part in any 24-hour period, immediately notify the National Response Center.

2. EPCRA § 304(b) [40 CFR § 355.40(b)(1)] - The owner or operator of a facility subject to this section shall immediately notify the LEPC and SERC of the release of a reportable quantity of any extremely hazardous substance or CERCLA hazardous substance.

3. EPCRA § 304(c) [40 CFR § 355.40(b)(3)] — As soon as practicable after a release which requires notice under (b)(1) of this section, such owner or operator shall provide a written follow-up emergency notice setting forth and updating the information required under paragraph (b)(2) of this section....

4. EPCRA § 311 [40 CFR § 370.21(e)(2)] – After October 17, 1987, the owner or operator of a facility subject to this section shall submit an MSDS for a hazardous chemical . . . or a list of hazardous chemicals . . . within three months after the owner or operator is first required to prepare or have available the MSDS or after a hazardous chemical requiring an MSDS becomes present in an amount exceeding the threshold established in § 370.20(b).

5. EPCRA § 313 [40 CFR § 372.30(a)] - For each toxic chemical known by the owner or operator to be manufactured (including imported), processed, or otherwise used in excess of an applicable threshold quantity......for a calendar year.....the owner or operator must submit to EPA and to the State a completed EPA Form R in accordance with this part.

The following table outlines the data quality errors found in Formosa's toxic release reporting. Positive changes indicate that a release amount was underreported. Negative changes indicate that a release amount was overreported. Dashes within the table indicate that no areas of noncompliance were found.

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Exempt (b)(4)

DATA QUALITY ERRORS FOUND IN FORMOSA'S TOXIC RELEASE REPORTING

Styrene/Fug. Air	Propylene Oxide/Fug. Air	Propylene/Fug. Air	Propylene/Stack Air	Naphthalene/Fug air	Naphihalene/Stack air	Hydrochloric acid/Fug. Air	n-hexane/fug. Air	n-hexane/Stack Air	Ethylene oxide/Fug. Air	Ethylene glycol/Fug. Air	Ethylene glycol/Stack Air	Ethylene/ Fug. Air	Ethylbenzene/Fug. Air	Ethylbenzens/Stack Air	Dicyclopentadiene/Fug. Air	Dicyclopentadiene/Stack Air	Dickloromethane (Methylene Chloride)/ Fug. atr	DichlerodiffueromethaneFug air	Dichlorodifluoromethene/Stack oir	Cyclohexane/Fug. Air	Chlorobenzere/Stack sir	ChlorineFug. Air	Benzene/Fug. Air	Benzend/Stack Air	Accialdchyde/Fug. Air	1,2-Dichloroethane (EDC)/Fug. Air	1,2-Dichtoroethane (EDCyStack Air	1,2,4-Trimethythenzene/Fug. Air	1,2,4-Trimeshylbencene/Steck Air	1,3-Buladiene/Fug. Air	1,3 Butudiene/Stack air	1,1,2-Trichloroethane/Stack sir	1,1,2,2-Tetrachloroethane/Stack air	Chemical/Release Medium		
7.1		10,732	• 1	•		703	3,179	• 7	65	4.706		10,973	1,569		4	,	•	•	•,1	72	•	653	847			8,314		1,167			2,301	0 1	0	(lbs)	Amount	2000
						ŀ		t .									V														100			(lbs)	NEIC	2000
																																		In Error	Amount	2000
																																		Difference	7	2000
	.	12,412		ļ.	1,	ŀ	4,256	.	99			13,853	•		1	1	ŀ	.	ļ.	l v		1	2,092			3,404	1,710	100000		573			.	(lbs)	Amount	2001
+	+	1	1	1	+	1		+	+	1		•		1	1	+		+																(lbs)	NEIC	2001
																																		(Jbs)	Amount	2001
												+																						Difference		2001
	i s	20,772	32,398	3/10	3,200	7 764	777.0	28,410		1,998	1,686	23,644		2,481	1	0.32	221	13,727	0	25	NA	-	3,349	13,127	2,099	14,635	4,157	22	3,314	2,154		NA.	1	(lbs)	Amount	2002
L	A _	1	1-	L			<u> </u>		1,	1.	4.	1.	l;		1	-		- -	- -	17	-	1	+	+			1				*		The second second	(164)	NEC	2002
		- N										-111					410.																	(84)	Amount in Fina	2002
							271 1		-11	352								111																Difference	Percent	7007

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Xylene/Fug, Air	Xylene/Stack air	Vinyl Chloride/Fug. Air	Vinyl Chloride/Stack Air	Toluenc/Fug. Air	Toluene/Stack Air	Tannium Tetrachloride/Fug. air	Tetrachloroethylene/Fug_Air	Tetrachloroethylene/Stack Air	Chemical/Release Medium		
4,167		3,304		1,291		,,	38	•	Reported (lbs)	1mount	2000
									Amount (lbs)	NEIC	2000
4									in Error (lbs)	A married	2000
									Percent Difference		2000
STATE OF									2 3		٩
	3,902	\$.206						•	ot Reported		2001
	3,902	1 ,206 :									
	3,902	4.206 :							Reported Amount (lbs)	1	2001 2001
	3,902	4.206 :				***************************************			Reported Amount (lbs)	11000	2001 2001
1,399		24		1,022					Reported Amount in Error (lbs) (lbs) (lbs) (lbs)		2001 2001
		24		7,027				4.	Amount NEIC Amount Reported Amount in Error Percent (lbs) (lbs) (lbs) Difference		2001 2001 2001 2001
		24		3,023				4.	Amount Neit Amount Amount Reported Amount in Error Percent Reported (lbs) (lbs) (lbs) Difference (lbs)		2001 2001 2001 2001 2001 2000

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Formosa - Polat Comfort, Texas

Areas of Concern

A.

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B.

C.

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RESOURCE CONSERVATION AND RECOVERY ACT

1. 30 TAC § 335.62 [40 CFR § 261.3(c)(2)] and the April 5, 1996 TNRCC letter regarding reclassification of wastewater treatment system sludge— ... any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate, is a hazardous waste.

(b)(4)

The wastewater treatment system receives contaminated groundwater meeting the listing of hazardous waste numbers U077, K019, and K020. On April 5, 1996, the TNRCC granted a delisting for the biological treatment sludge, with the condition that the groundwater must be pretreated prior to entering the wastewater treatment system to risk based levels in TNRCC Risk Reduction Rules and also the universal treatment standards in 40 CFR Part 268.

(b)(4)

2. 30 TAC § 335.62 [40 CFR § 262.11] – A person who generates a solid waste, as defined in 40 CFR 261.2, must determine if that waste is a hazardous waste ...

(b)(4)

3. 30 TAC § 335.69(d)(1) [40 CFR § 265.173(a), as referenced by 262.34(c)(1)(i)] – A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

EXEMPT (6)(4)

4. 30 TAC § 335.69(d)(2) [40 CFR § 262.34(c)(1)(ii)] — A generator may accumulate as much as 55 gallons of hazardous waste ... provided he marks his containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

(6)(9)

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5. 30 TAC § 335.69(e) [40 CFR § 262.34(c)(2)] – A generator who accumulates hazardous waste in excess of 55 gallons at or near any point of generation ... must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating

EXEMPT (b)(4)

6. 30 TAC § 335.69(a)(2) [40 CFR § 262.34(a)(2)] – A generator may accumulate hazardous waste on-site for 90 days or less ... provided that the date upon which each period of accumulation begins is clearly marked and visible for inspection on each container.

(b)(4)

Areas of Concern

A.

EXEMPT (b)(4)

their cooling towers, which may result in mismanagement of a nazaruous which has determined that petroleum contaminated debris that is removed from the solution of a K170 listed hazardous waste, which is crarified slurry on tank sediment and/or in-line filter/separation solids from petroleum refining operations. According to the process description provided by Formosa, the only contributing waste stream to the separator is storm water from the unit.

(5)(4)

C.

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Acdute 9-30-2005 Sy Formosa order. All the solid waste management units (SWMUs) included in the RCRA Facility Investigation are located in the southern part of the facility (the indicated in the roll the old wastewater treatment plant). The corrective action order requires Formosa to determine the nature and extent of releases of hazardous waste or constituents at regulated units and SWMUs at the facility. According to 40 CFR § 260.10, for the purpose of implementing corrective action under 3008(h), "facility" means all contiguous property under the control of the owner or operator. The RFI should include the entire site.

EXEMPT (6)(4)

Formosa has

completed some investigation and corrective action activities for the 1998 EDC release, but it has not been under the provisions of the 3008(h) order.

CLEAN AIR ACT

1. 40 CFR § 60.11(d), 40 CFR § 61.12(c), 40 CFR § 63.102(a)(4) - Maintain plant processes and pollution control equipment in a "manner consistent with good air pollution control practice for minimizing emissions..."; "...minimize emissions to the extent practical..."

Considering each quarter as an instance in which the cause of emission was determined and, therefore, "known" by the facility, Formosa reported recurring causes of emissions over 200 times (for over 2,600 hours of excess emission events) in the 11 quarters evaluated by NEIC.

EXEMPT (5)(4)

2. 40 CFR § 60.482-7(c)(1), 40 CFR § 61.242-7(c)(1) — [As opposed to monthly monitoring,] any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected...

EXEND(6)(4)

3. 40 § 60.482-7(c)(2) – If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months... $\subseteq Y \subseteq \mathbb{R} p = (6)(4)$

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40 CFR § 60.482-7(d)(2), 40 CFR § 61.242-7(d)(2), 40 CFR § 63.168(f)(2) - A first attempt at repair shall be made no later than five calendar days after each leak is detected...

EXEMM (10) (4)

5. 40 CFR § 60.482-7(d)(1), 40 CFR § 61.242-7(d)(1), 40 CFR § 63.168(f)(1) - When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, unless emissions would be greater by fixing the component or a shutdown is required to fix the component ...

EXEMPT (6)(4)

6. 40 CFR § 63.168(e)(2) - For use in determining monitoring frequency... the percent leaking valves shall be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs...

ExEMPT (6)(4)

40 CFR § 60.482-6 - Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve ...

EXEMPT (5)(4)

8. 40 CFR § 60.482-7(a) - Each valve shall be monitored monthly to detect leaks ... TCEQ 28MID - Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly...

EXEMPT (5)(4)

40 CFR § 60.482-7(a), 40 CFR § 61.242-7, 40 CFR § 63.168(b)(1) - Monitor all valves according to EPA Reference Method 21 (located at 40 CFR Part 60 Appendix A)...

ELEMPT (6)(4)

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10. 40 CFR § 61.357(d)(1) = Within 90 days after January 7, 1993, or by the date of initial startup for a new source with an initial startup after the effective date, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with this subpart.

EXETUPT (6)(4)

l. Startup of _____in the second quarter of 2002 caused the TAB value to exceed 10 Mg/yr. necessitating the installation and operation of various control equipment.

1. 40 CFR § 61.355(b) and 40 CFR § 61.342(a)(4) – 61.355(b) For purposes of the calculation required in paragraph (a) of this section, an owner or operator shall determine the annual waste quantity at the point of waste generation, unless otherwise provided 61.342(a)(4) The total annual benzene quantity is determined upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in

E4ERP7 (6)(4)

12. 40 CFR § 61.356(e)(2) An owner or operator using a treatment process or wastewater treatment system unit in accordance with Section 61.348 of this subpart shall maintain the

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Formosa - Point Comfort, Texas

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following records. The documentation shall be retained for the life of the unit. (2) If engineering calculations are used to determine treatment process or wastewater treatment system unit performance, then the owner or operator shall maintain the complete design analysis for the unit. The design analysis shall include for example the following information: Design specifications, drawings schematics,... and other documentation

ELERPT (6)(4)

13. 40 CFR § 61.356(e)(1) - An owner or operator using ... shall maintain the following records. The documentation shall be retained for the life of the unit. (1) A statement signed and dated by the owner or operator certifying that the unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur.

EVENPT (6)(4)

14. 40 CFR § 61.356(h) - An owner or operator shall maintain a record for each test of no detectable emissions required by.... The record shall include the following information: date the test is performed, background level measured during the test, the maximum concentration indicated by the instrument reading for each potential emission point.

ExEMPT (5)(4)

A.

EXERPT (6)(4)

B.

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C.

EXEND (6)(4)

D.

Exenp, (6)(4)

E,

EXEMPT (5)(4)

1,500 hours of excess emissions during startup/shutdown periods between January 2001 and September 2003. Formosa also reported over 480 hours of excess emissions between January 2001 and September 2003 for which no cause could be determined.

F. Evaluation of excess emission reports for Formosa shows at least 90,000 pounds of carbon monoxide, and at least 10,000 pounds of nitrogen oxides, were emitted by the facility, in excess of emission limits, from January 2001 through September 2003.

G.

EXENPT (S)(4)

CONFIDENTIAL BUSINESS INFORMATION

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Sy Formosa

	ENFORCEMENT CONFIDENTIAL
3.	Specific conditions in Formosa unit operating permits state "A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained."
	~~ 보통한 경기 마이 이 경로 경기에 되는 말로 되고 있다. 그는 그는 그는 그는 그는 그를 가고 있다. 그 마르 마이
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The range of benzene concentrations reported on the annual TAB submittals is highly variable. For several waste streams the benzene concentrations vary by three orders of

EXEMPT (6) (4)

M.

5 KENPT (6)(4)

EXEMPT (6)(4)

Spent caustic is by far the largest source of waste benzene identified on the TAB. 0.

EXENDT (6)(4)

EXENDT (5)(4)

CONFIDENTIAL BUSINESS INFORMATION

Sample results collected from the storm water sumps within the processing areas generally showed individual hydrocarbon concentrations significantly below 1 ppmv.

EXENDT (b)(4)

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U.S. Department of Justice

Environment and Natural Resources Division

Environmental Enforcement Section P.O. Box 7611 Ben Franklin Station Washington, DC 20044-7611

Telephone (202) 514-0056 Facsimile (202) 514-8395

November 9, 2007

VIA ELECTRONIC MAIL

Robert T. Stewart, Esq. 301 Congress Avenue, Suite 2000 Austin, TX 78701

Re:

Formosa Plastics Corporation

Baton Rouge, Louisiana and Point Comfort, Texas Facilities

Settlement Discussions

Dear Bob,

Although the United States would like to continue settlement discussions with Formosa Plastics Corporation (the "Company" or "FPC"), the United States continues to have serious concerns regarding: 1) the Company's continued noncompliance with the leak detection and repair provisions of 40 C.F.R., subpart VV, particularly its failure to properly follow, or direct its contractor to properly follow, EPA Reference Method 21, 40 C.F.R., Pt. 60, App. A-7, at the above-referenced facilities; and 2) the Company's failure to comply with the National Emission Standard for Benzene Waste Operations ("BWON"), 40 C.F.R., subpart FF, at the Olefins I and Olefins II units of the Point Comfort facility. I stressed at the conclusion of our October 3, 2007 meeting that these issues are extremely important to the United States, but, thus far, the United States does not perceive a commitment from FPC to correct the foregoing violations.

Thus, the United States has determined that, as a condition of further settlement discussions, the Company must commit to correcting those areas of noncompliance. Specifically, the United States requests that FPC:

- 1. Implement, or cause its LDAR contractor to implement, immediately and correctly, EPA Reference Method 21, 40 C.F.R., Pt. 60, App. A-7, as required by 40 C.F.R. § 60.485, at both the Point Comfort and Baton Rouge facilities. It is our understanding that the Company's LDAR contractor, Environmental Analytics, Inc., is fully capable of correctly implementing Method 21.
- 2. Retain a reputable environmental consultant, with substantial experience in BWON compliance, to perform a comprehensive audit of FPC's olefins units to identify and quantify all of FPC's potential benzene waste streams, and certify compliance with the BWON. We would anticipate that FPC could contract with an environmental consultant before the end of the year.

Before continuing settlement discussions, the United States would require a written commitment to implement these measures, as well as an extension of the current Tolling Agreement. Please provide us with that commitment and the Tolling Agreement extension on or before November 26, 2007.

The United States' request herein does not narrow the scope or substance of the violations identified thus far, and does not alter injunctive relief proposals already provided to the Company.

We look forward to hearing from the Company regarding this request. Please feel free to contact me should you have any questions.

Very truly yours,

/s/

Scott M. Cernich

cc: Marcia Moncrieffe, EPA Region 6

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CLEAN AIR ACT

MULTIMEDIA COMPLIANCE INVESTIGATION

FORMOSA PLASTICS CORPORATION - TEXAS (FPC-TX)
Point Comfort, Texas

Facility Address:

Formosa Plastics Corporation - Texas 201 Formosa Drive P.O. Box 700 Point Comfort, Texas 77978 361-987-7000

Investigation Dates:

November 17 through 20, 2003 February 2 through 12, 2004 April 29, 2004

Lead Investigators:

Ken Garing, Environmental Engineer Joe Wilwerding, Environmental Engineer

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Table 9

by Formusa

EXCESS EMISSIONS JANUARY 2001 THROUGH SEPTEMBER 2003 Formosa Plastics Corporation Point Comfort, Texas

Pollutant	Total Hours of Emitting Excess	Total Excess Emissions (lbs.)
СО	3,026	94447
NOx	697	10866

Table 10 MAJOR CO EXCESS EMISSION SOURCES JANUARY 2001 THROUGH SEPTEMBER 2003 Formosa Plastics Corporation Point Comfort, Texas

Emission Point Number	Description	Permit Limit (lbs./hr)	Total Hours of Emitting Excess	Total Excess CO Emissions (lbs.)
H02B	Polyethylene plant thermal incinerator B (HDPE)	15.42	33	37618
Stack 5	Unit 1	19166	31	17541
H923A	Polyethylene plant thermal incinerator A	15.42	703	11274
7E	Utilities gas turbine 5	59.13	21	7064
Stack 4	Unit 1	59.13	23	6128
6002C	Incinerator/scrubber system C	0.697	486	3386
1003	Olefins I plant cracking furnace 3	30.3	123	3034
7D	Utilities gas turbine 4	. 59.13	11	2286
LI-01	LLDPE thermal incinerator	8.98	440	1796
6002B	Incinerator/scrubber system B	0.697	144	971

LEAK DETECTION AND REPAIR

LDAR Regulatory Summary

Formosa is subject to three federal LDAR regulations at the Point Comfort plant under the Clean Air Act, as follows:

- 40 CFR Part 60 Subpart VV, Performance Standards for New Sources for Equipment Leaks (hereafter NSPS Subpart VV)
- 40 CFR Part 61 Subpart V, National Emission Standard for Equipment Leaks, as referenced by 40 CFR Part 61 Subparts F and J, National Emission Standard for Vinyl Chloride and Equipment Leaks (Fugitive Emission Sources) of Benzene (hereafter NESHAP Subpart V)
- 40 CFR Part 63 Subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks (hereafter HON Subpart H)

Table 11 shows, for each LDAR-regulated process unit, the unit name, abbreviation used by Formosa, and the total number of valves in light-liquid or gaseous service in the unit based on the facility recordkeeping database at the time of inspection. A specific Maximum Achievable Control Technology (MACT) standard which will regulate other hazardous air pollutant-containing equipment in Formosa's ethylene plant has been promulgated under 40 CFR Subpart 63 Subpart UU, but will not take effect for existing sources until 2006.

Table 11

UNIT VALVE COUNTS AND ABBREVIATIONS
Formosa Plastics Corporation - Texas
Point Comfort, Texas

Unit Name	Abbreviation	Total Valves
Chlor-alkali	C/A	644
Ethylene dichloride	EDC	1800
Ethylene glycol	EGVOC	2344
Gasoline hydrotreating	GHU	2493
High density polyethylene	HDPE	5394
High density polyethylene II	HDPE II	3827
Inland division/traffic & C3	INLANDIV/C3	1188
Linear low-density polyethylene	LLDPE	4105
Marine traffic	MT	1345
Olefins	OLEFINS	11415
Olefins II	OLII	11830
Polypropylene II	PPII	3276
Polypropylene	PPU/PPVOC	7957
Polyvinyl chloride	PVC	2459
Vinyl chloride monomer	VCM	7463
	Total	67540

Under operating permits issued by the TCEQ, Formosa is required to implement an alternative monitoring and repair program titled 28MID, at most facility process units. Formosa assembled Table 12 in order to track the applicability of each regulation to each process unit. According to Formosa environmental personnel, the most stringent requirements under each regulation are used for all component monitoring. In general, the 28MID program requirements are more stringent than federal NSPS Subpart VV and NESHAP Subpart V LDAR regulations.

Table 12

LDAR REGULATORY APPLICABILITY TABLE PROVIDED BY FORMOSA

Formosa Plastics Corporation - Texas
Point Comfort, Texas

FORMOSA PLASTICS CORPORATION, TEXAS INSPECTION PREPARATION GUIDELINES

FUGITIVE EMISSIONS MONITORING **Unit/Facility NSPS NESHAPS** Method Vinyl Plant Turbine N/A - N/A N/A N/A (FRAME 6) VCM Plant Subpart VV Subpart V Subpart H 28 MID **PVC Plant** Subpart VV Subpart V N/A 28 MID **EDC Plant** Subpart VV N/A Subpart H 28 MID **Utilities Plant** N/A N/A N/A N/A **IEM Plant** N/A N/A N/A **28 MID** Olefins I and II Subpart VV Subparts J. V N/A 28 MID Plants Ethylene Glycol Subpart VV N/A Support H 28 MID Plant Polypropylene I and Subpart VV N/A N/A **28 MID** II Plants HDPE 1 Plant Subpart VV N/A N/A **28 MID** HDPE 2 Plant Subpart VV N/A N/A 28 MID Marine Terminal Subpart VV Subparts J, V Subpart H 28 MID Facility (Traffic) Linear Low Density Subpart VV N/A N/A 28 MID Polyethylene Plant

Due to the overlapping nature of the regulations applicable to Formosa, NEIC assembled Table 13 to outline the monitoring and repair requirements for valves and pumps. Used in combination with Table 12, Table 13 shows the monitoring and repair requirements for valves and pumps in specific plant process units. Formosa reportedly conducts quarterly valve monitoring in all regulated units.

^{*} The Chlorine Unloading Station has been shutdown and non-operational for over 3 years.

^{**} Applies only to tank DT-403 and ancillary equipment.

^{***} Applies only to the GHU Unit within Olefins.

Table 13

MONITORING AND REPAIR REQUIREMENTS FOR VALVES AND PUMPS Formosa Plastics Corporation - Texas Point Comfort, Texas

	Monitoring Frequency (M, Q, S, A) ¹			Leal	Α	t Repa ttemp days)		Shut	il Repa down I (days)			
Component Type/Service	NSPS Subpart VV NESHAP Subpart V	HON Subpart H	TCEQ 28MID	NSPS Subpart VV NESHAP Subpart V	HON Subpart H	TCEQ 28MID	NSPS Subpart VV NESHAP Subpart V	HON Subpart H	TCEQ 28MID 2	NSPS Subpart VV NESHAP Subpart V	HON Subpart H	TCEQ 28MID ²
Valves			·					٠				
Gaseous Light-liquid	Q ³	M ³	Q ³	10,000	500	500	5	5	5	15	15	15
Pumps												
Light-liquid	M	M	Q	10,000	1,000	500	5	5	5	15	15	15

M - monthly, Q - quarterly, S - semiannually, A - annually

Repair attempts shall be made concurrently with monitoring to ensure that the lowest leak rate possible is obtained

If leak percentage greater than 2 percent; less frequently if lower leak percentage achieved

LDAR Program Background

As shown in Table 11, Formosa maintains approximately 70,000 valves which are subject to federal, state, and/or permit leak detection and repair (LDAR) requirements. equipment is located in 15 processing areas. Under the plant LDAR program, Formosa monitors for fugitive leaks of volatile organic compounds (VOCs) from valves, pumps, compressors, and other types of equipment using EPA Reference Method 21 (40 CFR Part 60 Appendix A).

Formosa has hired Environmental Analytics Inc. (EAI) to perform monitoring and first repair attempts to some components under the facility LDAR program. Monitoring is reportedly performed using TVA-1000 instruments. Formosa employees performed the LDAR work until 1997, when EAI was first hired. EAI reportedly performed some retagging after being hired, and continues to hang tags in new process units or in existing units where tags are missing.

If first repair attempts fail, EAI submits a work request to Formosa's maintenance department. Maintenance usually informs EAI of repair attempts so the contractor can aid in fixing the leak (by determining the source/size of the leak after repair attempts are made) and confirm a final repair has been made. Maintenance personnel reportedly also use a soap-bubble solution to aid in fixing leaks if EAI personnel are unavailable. In this case, EAI monitoring technicians reportedly return to the repaired component for a Method 21 confirmation reading.

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Under the TCEQ 28MID program, Formosa is required to perform directed maintenance—monitoring while repairs are made—in order to obtain the greatest leak reduction possible. (Formosa is allowed to use favorable emissions factors for reporting annual emissions from equipment leaks under the TCEQ 28MID program.) Specific conditions in Formosa unit operating permits state "A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained" [Appendix K].

Exempt (b)(#)

Recordkeeping and Reporting

Formosa uses the LEAKDAS® database software to manage information pertaining to its LDAR program. According to EAI personnel, the FEMS® database software was used until 1999 to manage monitoring and repair information for the LDAR program, after which time EAI switched to the LEAKDAS® software. The database functions as the central repository for regulatory applicability, monitoring frequency, repair history, and other information required to be maintained under applicable LDAR regulations, and is the primary source of information for periodic reports submitted by Formosa. NEIC received copies of Formosa's LEAKDAS data tables for 1999 through November 2003, and reviewed the information for compliance with state and federal LDAR regulations.

Monitoring/Remonitoring Requirements

Under the TCEQ 28MID program, Formosa typically performs monitoring of light-liquid and gaseous-service valves on a quarterly basis, in all process units. However, NSPS Subpart VV and NESHAP Subpart V impose additional requirements for quarterly monitoring frequencies. Under 40 CFR § 60.482-7(c)(1) and 40 CFR § 61.242-7(c)(1), any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

Exempt (5)(4)

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Under

NSPS Subpart VV section 60.482-7(c)(2), Formosa must monitor valves which have leaked above the 10,000-ppm regulatory threshold on a monthly basis, until the valves have not leaked for at least 2 consecutive months.

Repair Requirements

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HON Subpart H section 63.168(f)(2) requires Formosa to make a first repair attempt to subject valves leaking above 500 ppm within 5 days after identification of the leak [Table 13]. The 5-day first repair attempt requirements, under NSPS Subpart VV and NESHAP Subpart V, apply only to leaks greater than or equal to 10,000 ppm in subject plant areas.

Reporting Requirements

On most all semiannual submittals for HON Subpart H, NSPS Subpart VV, and NESHAP V, Formosa has reported leak percentages for each month monitoring was conducted. Because Formosa has chosen to monitor all process units on a quarterly basis (as opposed to less frequently based on a percentage of valves leaking), calculation and reporting of leak percentages is not required on NSPS Subpart VV and NESHAP V submittals.

eporting of valve leak percentages is required under HON Sub	part H.
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a is only allowed to exclude non-repairable valves which total le	ess than
ber of regulated valves in the unit in the leak percent calculation	for the
XENPT (6)(4)	
sa is only allowed to exclude non-repairable valves which total leaber of regulated valves in the unit in the leak percent calculation	ess

HON Subpart H requires the percentage of leaking valves to be reported as the average of the percentage of leaking valves from the most recent two monitoring periods (two-period rolling average). $\mathcal{L} \vee \mathcal{L} \wedge \mathcal{L} \wedge \mathcal{L}$

Investigation Monitoring/Field Audit Results

NEIC performed comparative, VOC monitoring in Formosa process units and audited field-related activities managed under the facility's LDAR program. Using NEIC procedures, representatives from EPA Region 6 and TCEQ Region 14 also collected field monitoring data during the inspection. Results from all parties (NEIC, EPA Region 6, and TCEQ Region 14) are presented in this report. All monitoring was conducted using Foxboro Toxic Vapor Analyzers (TVAs), model 1000, which were calibrated daily using certified methane-in-air calibration gases, in accordance with NEIC operating procedures. Monitoring and field audit results are tabulated in Appendix Q.

NEIC and/or EPA Region 6/TCEQ personnel (hereafter "Agency personnel") identified an open-ended line and missing/unreadable component identification tags during the field inspection. Section 63.167(a)(1) under HON Subpart H, section 60.482-6 under NSPS Subpart VV, and section 61.242-6 under NESHAP Subpart V require a secondary closure device on all open-ended lines, in order to minimize hydrocarbon leaks through the valve body.

Formosa monitoring personnel typically use the LDAR identification tags to locate equipment for monitoring. If identification tags are missing or unreadable, or if there are multiple identification tags present, tracking the appropriate information to ensure monitoring is conducted can become difficult.

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In general, NEIC does not include leaks which cannot be confirmed using company instruments in leak rate comparisons. However, in cases where known causes prevent a leak confirmation (e.g., if a leak were repaired before confirmation could occur), NEIC retains the leak in (unconfirmed leaks arose during the field audit at Formosa and were related CONFIDENTIAL

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with NEIC calibration gases, in accordance with NEIC operating procedures, before monitoring was performed on November 17, 2003.⁶

Table 14.

NEIC MONITORING RESULTS COMPARISON

Formosa Plastics Corporation - Texas
Point Comfort, Texas

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One leak assumed in order to prevent an infinite result in the Leak % Ratio calculation; not included in the total number leaking for Formosa

Table 15

EPA REGION 6 AND TCEQ REGION 14 MONITORING RESULTS

Formosa Plastics Corporation - Texas

Point Comfort, Texas

EXEMPT (5)(4)

EXEMPT (6)(4)

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In order to evaluate the ability of EPA Region 6 and TCEQ Region 14 personnel to identify leaking components, NEIC observed monitoring by both parties to ensure appropriate equipment leak interface points were monitored for sufficient time (in general, an inability to identify leaks results in a conservative comparison of leak rates between regulatory- and company-collected information). NEIC believes the monitoring conducted by EPA Region 6 and TCEQ Region 14 personnel to be accurate and correct based on observation of the non-NEIC personnel conducting monitoring, veri prior to use, and confirmation of testing results by Formosa personnel.

EXEMPT (5)(4)

Table 16

AGENCY-COMBINED MONITORING RESULTS COMPARISON
Formosa Plastics Corporation - Texas
Point Comfort, Texas

		Forms)SA			Agency		
Unit	Monitored Month	No. Leaking	No. Monitored	Leak %	No. Leaking	No. Monitored	Leak %	Leak % Ratio: Agency/Formosa
	Aug 2003	2	8122	0.02%	2	855	0.23%	9.5
	Jul 2003	4	2525	0.16%	3	307	0.98%	6.2
	Apr 2003	110	13853	0.79%	24	654	3.67%	4.6
	Jun 2003	11	1275	0.08%	4	407	0.98%	12.5
	Jun 2003	20	4190	0.48%	15	368	4.08%	8.5
	May 2003	31	5541	0.56%	20	649	3.08%	5.5
	May 2003	16	3410	0.47%	9	292	3.08%	6.6
Totals		183	38916	0.47%	77	3532	2.18%	4.6

One leak assumed in order to prevent an infinite result in the Leak % Ratio calculation; not included in the total number leaking for Formosa

EXERPT (5)(4)

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EXEMPT (5)(4)

Project No. VP0614

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REPARTED 9-30-2005

BENZENE WASTE NESHAP EVALUATION

Introduction

The purpose of the benzene NESHAP regulation (Subpart FF) is to control benzene emissions released during the collection and treatment of waste streams containing benzene. Benzene, along with other volatile organic compounds (VOCs), evaporates from process wastewaters as they are transported through the sewer collection system. Benzene continues to evaporate as the wastewaters are treated at a wastewater treatment plant. Subpart FF regulations are designed to ensure that wastewaters are handled in a manner to minimize benzene emissions and so that the volatilized benzene will be collected and/or destroyed.

The requirements of the Benzene NESHAP apply to four industries: chemical manufacturing plants, coke by-product recovery plants, petroleum refineries, and off-site hazardous waste treatment, storage, and disposal facilities (TSDF). Formosa's chemical complex in Point Comfort, Texas, is chemical manufacturing, and, therefore,, is an "affected facility" subject to the provisions of Subpart FF.

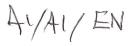
Affected facilities were initially required to calculate the total annual benzene quantity (TAB) generated at the facility and to report this value by January 7, 1993 or by initial startup of a new source. Depending upon the calculated TAB quantity, different Subpart FF provisions applied. For facilities with TABs greater than 1 Mg/yr. but less than 10 Mg/yr., the regulation only requires an annual update of the TAB be submitted. Prior to April 6, 2001, Formosa reported TAB values between 1 and 10 Mg/yr.

For facilities with TABs greater than 10 Mg/yr., the regulation requires control equipment must be installed, operated, monitored, and TAB reports be updated annually. The specific information required in the annual update varies depending on the compliance option selected by the facility. Since reporting year 2000 (the April 6, 2001 TAB submittal) Formosa reported TAB values in excess of the 10 Mg/yr. threshold. The TAB values have increased each year from 10.44 to 36.84 Mg/yr., principally from the addition of the second olefins unit. Formosa has installed control equipment and treatment processes to handle benzene wastes.

Generally, one of two compliance options are used, either the 2 Mg Option [40 C.F.R. § 61.342(c)(3)] or the 6 Mg Option [40 C.F.R. § 61.342(e)]. Depending upon the compliance option selected, the waste streams that require treatment and the waste management units that do not have to meet control standards differ slightly.

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REPORTED 9-30-2015





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Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-987-7000 Fax: 361-987-2363

RECEIVE

December 21, 2009

DEC 24 2009

Air/Toxics & inspection Coordination Branch 8EN-A

Certified Mail: 7008 1830 0000 9431 0369

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Sir:

Appendix C, Paragraph 2 of the Consent Decree lodged in Civil Action 6:09-cv-00061 requires Formosa to submit to EPA the current LDE plans for FPC TX and FPC LA three months after the Date of Lodging. These plans have been approved by their respective states and are attached.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Enclosure

Cc: Certified Mail: 7008 1830 0000 9431 0376
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, D.C. 20460

Certified Mail: 7008 1830 0000 9431 0383 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, TX 78701

1/00/8925987 AI/AILET



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 Ross Avenue Dallas, Texas 75202-2733

July 7, 2009

CERTIFIED MAIL - RETURN RECEIPT REQUESTED: 7007 2560 0002 7737 3602

Mr. Randall P. Smith
Vice President/General Manager
Formosa Plastics Corporation and Formosa Hydrocarbons Company
P.O. Box 700
201 Formosa Dr.
Point Comfort, TX 77987

Subject: Notice and Finding of Violations

Dear Mr. Smith:

Enclosed is a Notice and Finding of Violations (Notice) issued to Formosa Plastics Corporation and Formosa Hydrocarbons Company (collectively, "the Company") pursuant to Section 113(a)(1) and (3) of the Clean Air Act, 42 U.S.C. § 7413(a)(1) and (3). In the Notice, the Environmental Protection Agency is notifying the Company of violations of the Texas State Implementation Plan, Code of Federal Regulations and the Title V permitting requirements at its plant in Point Comfort, Texas.

Please note Section E. of the Notice - Opportunity for Conference. As indicated in the Notice, any request to confer should be directed to Marcia E. Moncrieffe, Senior Enforcement Counsel, at (214) 665-7343.

Sincerely,

John Blevins Director

Compliance Assurance and Enforcement Division

Enclosure

cc: John Sadlier, Deputy Director
Office of Compliance & Enforcement
Texas Commission on Environmental Quality

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 6 DALLAS, TEXAS

IN THE MATTER OF:	
FORMOSA PLASTICS CORPORATION AND FORMOSA HYDROCARBONS COMPANY)) PROCEEDING PURSUANT TO) SECTION 113 OF THE CLEAN AIR ACT
POINT COMFORT, TEXAS)))

NOTICE AND FINDING OF VIOLATIONS

This Notice and Finding of Violations (Notice) is issued to Formosa Plastics Corporation ("Formosa") and Formosa Hydrocarbons Company ("FHC") (collectively, "the Company") for violations of the Clean Air Act ("CAA" or the "Act"), 42 U.S.C. § 7401 et seq. Specifically, the Company violated the Texas State Implementation Plan ("SIP"), the Code of Federal Regulations ("CFR"), and/or the respective Title V permitting requirements for the facilities. Formosa is a corporation organized and existing under the laws of the State of Delaware and doing business in the State of Texas and FHC is a separate legal entity and a sister company of Formosa.

This action pertains to the Formosa facility located at 201 Formosa Texas Drive, Point Comfort Texas and the adjacent FHC facility located at 103 Fannin Road, Point Comfort, Texas. At all times relevant to this action, the Company owned and operated the facilities.

This Notice is issued pursuant to Sections 113(a)(1) and (3) of the Clean Air Act ("CAA" or the "Act"), 42 U.S.C. §§ 7413(a)(1) and (3). The authority to issue this Notice has been delegated to the Regional Administrator of EPA Region 6, and redelegated to the Director, Compliance Assurance and Enforcement Division, EPA Region 6.

A. STATUTORY AND REGULATORY BACKGROUND

1. Pursuant to Section 110 of the CAA, 42 U.S.C. § 7410, each State must adopt and submit to EPA for approval, a SIP that provides for attainment and maintenance of the national ambient air quality standards ("NAAQS"). The State of Texas has adopted a SIP that has been approved by EPA. 40 C.F.R. Part 52, Subpart SS. The Texas SIP relevant provisions of 30 Texas Administrative Code ("TAC"). Chapter 116 – Control of Air Pollution by Permits for New Construction or Modification. 40 C.F.R. § 52.2270(c). Violations of a federally approved Texas SIP are federally enforceable pursuant to Sections 110 and 113 of the Act, 42 U.S.C. §§ 7410 and 7413.

- 2. Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1), requires each State to develop and submit to EPA an operating permit program which meets the requirements of Title V. On November 30, 2001, EPA granted full approval to the Texas Title V operating permits program. 40 C.F.R. Part 70, Appendix A. Major stationary sources of air pollution and other sources covered by Title V are required to obtain an operating permit that includes emission limitations and such other conditions necessary to assure compliance with all applicable requirements of the Act. Sections 502(a) and Section 504(a) of the Act, 42 U.S.C. §§ 7661a(a) and 7661c(a).
- 3. The Title V operating permit program does not generally impose new substantive air quality control requirements (which are referred to as "applicable requirements"), but does require permits to contain monitoring, recordkeeping, reporting, and other requirements to assure compliance by sources with existing applicable requirements as found in 57 Fed. Reg. 32250, 32251 (July 21, 1992).
- 4. Under 40 C.F.R. § 70.1(b), "all sources subject to [Title V must] have a permit to operate that assures compliance by the source with all applicable requirements." Applicable requirements are defined in 40 C.F.R. § 70.2 to include "(1) any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title I of the [Clean Air] Act that implements the relevant requirements of the Act, including any revisions to that plan promulgated in [40 C.F.R. Part 52]."
- 5. Texas defines "applicable requirement" in relevant part, to include "[30 TAC] Chapter 116... (relating to Control of Air Pollution by Permits for New Construction or Modification) and any term or condition of any preconstruction permit". 30 TAC § 22.10(2)(H). Therefore, any term or condition of a preconstruction permit issued pursuant to a federally approved provision of Chapter 116 included in a Title V permit is federally enforceable.

B. PRELIMINARY ALLEGATIONS

- 6. The Company is a "person" as that term is defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).
- 7. In November 2003 and February 2004, teams of EPA inspectors and engineers from Region 6 and the National Enforcement Investigation Center, along with representatives of the State of Texas, conducted an inspection of the Company's facilities (the Inspection).

C. FINDING OF VIOLATIONS

8. Paragraphs 1-7 are realleged and incorporated by reference.

<u>Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry</u>

- 9. Pursuant to 40 C.F.R. § 60.480, the Company operates an affected facility since it produces polyvinyl chloride and commenced construction after January 5, 1981. 40 C.F.R. Part 60, subpart VV is therefore applicable to Formosa's operation, specifically the Purification Unit (PPU), the High Density Polyethylene II Plant (HDPE II), the FHC, the High Density Polyethylene I (HDPE), the Linear Low Density Polyethylene (LLDPE), the Marine Traffic (MT), the Polypropylene (PPVOC), the Olefins II (OLII), the Polypropylene II (PPII), and the Olefins units.
- 10. Pursuant to 40 C.F.R. § 60.482-7(a), each valve shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 60.485(b) and shall comply with 40 C.F.R. §§ 60.482-7(b) through (e), except as provided in 40 C.F.R. §§ 60.482-7(f), (g), and (h) and 40 C.F.R. §§ 60.483-1, 2, and 40 C.F.R. § 60.482-1(c).
- 11. Pursuant to 40 C.F.R. § 60.482-7(c)(2), if a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months. 40 C.F.R. § 60.482-7(b) defines a leak to be an instrument reading that measures a reading of 10,000 ppm or greater.
- 12. Pursuant to 40 C.F.R. § 60.482-7(d)(1), when a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected, except as provided in 40 C.F.R. § 60.482-9.
- 13. Pursuant to 40 C.F.R. § 60.482-7(d)(2), a first attempt at repair shall be made no later than five calendar days after each leak is detected.
- 14. Pursuant to 40 C.F.R. §§ 60.482-6(a)(1) and (2), each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 C.F.R. § 60.482-1(c). The cap, blind flange, plug or a second valve shall seal the open end at all times except during operations requiring process fluid through the open-ended valve or line.
- 15. Pursuant to Section 110 of the CAA, 42 U.S.C. § 7410, each state shall, after reasonable notice and public hearings, adopt and submit to the administrator, a SIP which provides for implementation, maintenance, and enforcement of the national primary and secondary NAAQS in such state.
- 16. In accordance with Section 110 of the CAA, 42 U.S.C. § 7410, on June 17, 1998, the State of Texas adopted regulations Title 30 TAC §§ 116.115 and 116.116(b) that became effective July 8, 1998. 30 TAC §§ 116.115 and 116.116(b) were approved by EPA (67 FR 58697) on September 18, 2002, and became federally enforceable on October 18, 2002.

- 17. In accordance with Section 110 of the CAA, 42 U.S.C. § 7410, on November 20, 2002, the State of Texas adopted regulations Title 30 TAC §§ 116.115 and 116.116(b)) that became effective December 11, 2002. These particular versions of 30 TAC §§ 116.115 and 116.116(b) were approved by EPA (67 FR 64543) on November 14, 2003, and became federally enforceable on December 15, 2003.
- 18. Pursuant to 30 TAC § 116.115(c) of the Texas SIP (General and Special Conditions), the permit holders shall comply with all special conditions contained in the permit document.
- 19. Pursuant to 30 TAC § 116.116(b) of the Texas SIP, on December 17, 2002, the Texas Commission on Environmental Quality ("TCEQ"), issued to Formosa an Air Preconstruction Permit and Amendments (Permit Numbers 19166 and PSD-TX-760M6) for its High Density Polyethylene I Plant and Traffic units.
- 20. Pursuant to 30 TAC § 116.116(b) of the Texas SIP, on October 16, 2002, the TCEQ issued to Formosa an Air Preconstruction Permit and Amendments (Permit Numbers 19200 and PSD-TX-760M5) for its Polypropylene II Plant.
- 21. Pursuant to 30 TAC § 116.116(b) of the Texas SIP, on November 2, 2002, the TCEQ issued to Formosa an Air Preconstruction Permit and Amendments (Permit Numbers 19168 and PSD-TX-760M6) for its OLEFINS I unit.
- 22. Pursuant to 30 TAC § 116.116(b) of the Texas SIP, on January 27, 2004, the TCEQ issued to Formosa an Air Preconstruction Permit and Amendments (Permit Numbers 7699 and PSD-TX-226M6) for its Vinyl Chloride Monomer (VCM) and PVC units.
- 23. Pursuant to 30 TAC § 116.116(b) of the Texas SIP, on November 19, 2003, the TCEQ confirmed that Formosa's Air Preconstruction Permit and Amendments (Permit Numbers 20203 and PSD-TX-760M6) for Formosa's LLDPE unit was renewed and approved on October 9, 2003.
- 24. Pursuant to Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), whenever on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of an applicable implementation plan or permit, the Administrator after a thirty-day notice may bring a civil action in accordance with Section 113(b) of the CAA, 42 U.S.C. § 7413(b).
- 25. Pursuant to Permit Numbers 19166 and PSD-TX-760M6; 19200 and PSD-TX-760M5, 7699 and PSD-TX-226M6; 20203 and PSD-TX-760M6; and 19168 and PSD-TX-760M6, Special Conditions H, damaged or leaking valves, flanges, compressor seals, and pump seals found to be emitting VOC in excess of 500 ppmv or found by visual inspection to be leaking, shall be tagged, and replaced or repaired. Every reasonable effort shall be made to repair a leaking component, as specified in this paragraph, within 15 days after the leak is found. If the repair of a component would require a unit shutdown, the repair may be

delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging.

- 26. During the Inspection, the inspectors reviewed Formosa's Valve Monitoring Events by Quarter. Based upon the facility's monitoring record, the inspectors concluded that from January 2000 through November 2003, Formosa failed to monitor approximately 5,670 valves in the PPU and in HDPE II units. Formosa has not provided EPA with any documentation to demonstrate that any of the aforementioned exceptions applied to the PPU and the HDPE II units. Formosa violated 40 C.F.R. § 60.482-7(a) by failing to monitor monthly approximately 5,670 valves.
- 27. A review of Formosa's Monthly Remonitoring Summary record, from January 1999 through August 2003, shows recorded leak readings of 10,000 ppm or greater for 42 valves. Nine of the valves are located at the FHC unit; two each in the HDPE, HDPE II and LLDPE units; one each in the MT and PPVOC units; four each in the OLII, PPII, PPU units and the remaining 13 in the OLEFINS unit. The Monthly Remonitoring Summary record also shows that on 62 separate occasions, Formosa did not monitor valves until a leak was undetected for two successive months. Formosa has therefore violated 40 C.F.R. 60.482-7(c)(2) by failing to comply with the monitoring standards set forth for valves in gas/vapor service and in light liquid service.
- 28. During the Inspection, the inspectors identified 66 valves in the LLDPE and HDPE units that were not monitored since the third quarter of 2002. Formosa violated 40 C.F.R. § 60.482-7(a) by not monitoring its valves monthly.
- 29. During the Inspection in November 2003, the inspectors monitored 3,300 valves in seven process units located at the Formosa facility. In February 2004, the inspectors remonitored three of the previous seven process units, monitoring 49 valves. The inspectors following Method 21 found 77 valves leaking greater than 500 ppm, resulting in a leak rate of 2.18 %. Formosa reported a leak rate of .47 % for its monitoring conducted May through August 2003, which is considerably lower than the leak rate calculated by the inspectors. Formosa has therefore violated its PSD Permits by not accurately following Method 21.
- 30. In reviewing Formosa's LDAR record-keeping databases, the inspector documented 52 valves that had a leak reading of more than 500 ppm from September 1999 through November 2003. Twenty-six of these valves had a leak reading of more than 10,000 ppm during the same time period. In discussions with Formosa, Formosa submitted written documentation explaining the status of the 52 valves: 23 of the violations are beyond the statute of limitation; 20 are in compliance; and nine are outstanding. Formosa has therefore violated its PSD Permits, the SIP, and 40 C.F.R.§ 60.482-7(d)(2), by not attempting a first repair no later than five calendar days after each leak is detected.
- 31. In reviewing Formosa's LDAR record-keeping databases, the inspector documented 68 valves that had a leak reading of over 500 ppm from January 1999 through November 2003. Fifty-three of these valves had a leak reading of more than 10,000 ppm during the same time period. In discussions with Formosa, Formosa submitted written documentation explaining the

status of the 68 valves: nine of the violations are beyond the statute of limitation; 53 are in compliance; and six are outstanding. Formosa has violated its PSD Permits, the SIP, and 40 C.F.R. § 60.482-7(d)(1), by not repairing a detected leak as soon as practicable, but no later than 15 calendar days after the leak is detected.

32. During the Inspection, the inspectors observed and documented one open-ended line in the HDPE unit. The open-ended line was not closed with a cap, blind flange, plug, or a second valve. Formosa has not provided EPA with evidence of an applicable exception. Formosa has therefore violated 40 C.F.R. §§ 60.482-6(a)(1) and (2) by not closing its open-ended line.

National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks

- 33. Pursuant to 40 C.F.R. § 63.160(a), valves that are intended to operate in organic hazardous air pollutant service for 300 hours or more during the calendar year within a source are subject to the provisions of a specific subpart in 40 C.F.R. Part 63, that references subpart H.
- 34. Pursuant to 40 C.F.R. §§ 63.162-6(a)(1) and (2), each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 C.F.R. § 60.482-1(c). The cap, blind flange, plug or a second valve shall seal the open end at all times except during operations requiring process fluid through the open-ended valve or line.
- 35. Pursuant to 40 C.F.R. § 63.168(b), the owner or operator of a source subject to 40 C.F.R. Part 63, subpart H, shall monitor all valves, except as provided in 40 C.F.R. § 63.162(b) of subpart H and 40 C.F.R. §§ 63.168 (h) and (I) at the intervals specified in 40 C.F.R. § 63.168(c) and (d) and shall comply with all other provisions of 40 C.F.R. § 63.168, except as provided in 40 C.F.R. §§ 63.171, 63.177, 63.178, and 63.179.
- 36. 40 C.F.R. § 63.168(d) sets forth the intervals that the owner or operator shall monitor valves for leaks using the calculation for percent leaking valves as determined by 40 C.F.R. § 63.168(e).
- 37. Pursuant 40 C.F.R. § 63.168(e)(2), percent leaking valves shall be calculated as a rolling average for two consecutive monitoring periods for monthly, quarterly, or a semiannual monitoring program.
- 38. Formosa monitors its valves on a monthly basis. A review of Formosa's semiannual reports from January 17, 2001 to July 24, 2003, shows that Formosa had not calculated its percent leaking valves as a rolling average for two consecutive monitoring periods. Formosa therefore has violated 40 C.F.R. § 63.168(e)(2).

National Emission Standards for Benzene Waste

39. The provisions of 40 C.F.R. Part 61, subpart FF are applicable to owners and operators of chemical manufacturing plants, coke byproduct recovery plants, and petroleum

refineries. Formosa operates a chemical manufacturing plant and is therefore subject to the requirements of 40 C.F.R. Part 61, subpart FF.

- 40. Pursuant to 40 C.F.R. § 61.357(d)(1), if the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the owner or operator shall submit to the EPA Administrator within 90 days after January 7, 1993, unless a waiver of compliance is granted, or by the date of initial startup for a new source with an initial startup after the effective date, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with 40 C.F.R. Part 61, subpart FF.
- 41. Formosa in 2000 and 2001 (Reported Total Annual Benzene (TAB)) showed TAB values that exceeded 10 Mg/yr, 10.68 Mg/yr of TAB for the Olefins II unit which was brought on line in June 2001 and 30.18 Mg/yr of TAB for both OLEFINS process units. Formosa was therefore required to submit to the Administrator a certification that the equipment necessary to comply with the standards had been installed and that the required initial inspections or test had been carried out in accordance with 40 C.F.R. Part 61, subpart FF.
- 42. 40 C.F.R. § 61.355 (b) requires that an owner or operator, for purposes of calculating the TAB, determine the annual waste quantity at the point of generation, unless otherwise provided in 40 C.F.R. §§ 61.355 (b)(1), (2), (3), and (4), by one of the methods given in 40 C.F.R. §§ 61.355 (b)(5) through (b)(7).
- 43. Pursuant to 40 C.F.R. § 61.341, point of generation means the location where the waste stream exits the process unit component or storage tank prior to handling or treatment in an operation that is not an integral part of the production process or in the case of waste management units that generate new wastes after treatment, the location where the waste stream exits the waste management unit component.
- 44. Pursuant to 40 C.F.R. § 61.356(e), an owner or operator using a treatment process or wastewater treatment system unit in accordance with 40 C.F.R. § 61.348, shall maintain for life the documents listed in 40 C.F.R. § 61.356(e)(1) through (4).
- 45. Pursuant to 40 C.F.R. § 61.356(e)(1), an owner or operator shall prepare a statement signed and dated, certifying that the unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and the benzene content expected to occur. The owner or operator is required to keep a copy of this certification for the life of the unit.
- 46. Pursuant to 40 C.F.R. §§ 61.356(e)(2) and (3), if an owner or operator uses engineering calculations or performance tests to determine treatment process or wastewater treatment system unit performance, the owner or operator shall maintain specific documentation of either approach as is set forth in 40 C.F.R. §§ 61.356(e)(2) and (3).

- 47. Pursuant to 40 C.F.R. § 61.356(h), an owner or operator shall maintain a record for each test of no detectable emissions required by 40 C.F.R. §§ 61.343 through 61.347 and 61.349. 40 C.F.R. § 61.356(h) requires specific information to be included in the record.
- 48. During the Inspection, the inspectors made repeated requests for a copy of the appropriate Olefins II certification and Formosa did not have a copy to give the inspectors. In subsequent discussions with Formosa, Formosa provided EPA with a copy of what seems to be a certification dated May 30, 2001. The copy was not accompanied by a cover letter date to the Administrator. To date, EPA has no evidence that the certification was submitted to the Administrator by the date of initial startup. Formosa violated 40 C.F.R. § 61.357(d)(1) by not submitting to the Administrator a certification that the equipment necessary to comply with the standards had been installed and that the required initial inspections or tests had been carried out in accordance with 40 C.F.R. Part 61, subpart FF.
- 49. In observing Formosa's operation of its Spent Caustic System, the inspectors concluded that Formosa was not obtaining its samples at the point of generation in violation of 40 C.F.R. § 61.355 (b).
- 50. During and subsequent to the Inspection, the inspectors requested, from Formosa, records for the design flow criteria for the Zimpro oxidizers and steam strippers. Formosa did not provide the records to the inspectors and has therefore violated 40 C.F.R. §§ 61.356(e)(2) or (3).
- 51. The inspectors also requested a copy of the certification, which documents that the treatment units are designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur. Formosa did not provide a copy of the certification for the Olefins I and II units in violation of 40 C.F.R. § 61.356(e)(1).
- 52. In reviewing Formosa's fugitive monitoring logs, the inspectors observed that information required by the regulations were not listed on the log. For example, the log did not include test dates, background levels measured during the test, and the maximum concentration indicated by the instrument reading measured for each potential leak interface. Formosa has therefore violated 40 C.F.R. § 61.356(h).21.

D. ENFORCEMENT

Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1), provides that at any time after the expiration of 30 days following the date of the issuance of a Notice of Violation, the Administrator may, without regard to the period of violation, issue an order requiring compliance with the requirements of the state implementation plan or permit, issue an administrative penalty order pursuant to Section 113(d), or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.

Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), provides in part that if the Administrator finds that a person has violated, or is in violation of Title V of the Act, including

Page 9

a requirement or prohibition of any rule, plan, order, waiver, or permit promulgated, issued, or approved under Title V, the Administrator may issue an administrative penalty order under Section 113(d), issue an order requiring compliance with such requirement or prohibition, or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.

E. OPPORTUNITY FOR CONFERENCE

The Company may, upon request, confer with EPA. The conference will enable the Company to present evidence bearing on the finding of violations, on the nature of the violations, and on any efforts it may have taken or proposes to take to achieve compliance. The Company has a right to be represented by counsel. A request for a conference must be made within ten (10) days of receipt of this Notice, and the request for a conference or other inquiries concerning the Notice should be made in writing to:

Marcia E. Moncrieffe
Senior Enforcement Counsel (6RC-EW)
Office of Regional Counsel
U.S. EPA - Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

If you have any questions, please feel free to call Ms. Moncrieffe at (214) 665-7343.

F. EFFECTIVE DATE

This Notice shall become effective immediately upon issuance.

Dated: 7-7-09

John Blevins

Director

Compliance Assurance and Enforcement Division

🔁 Authorized Valves.pdf	10/28/2009 11:20	Adobe Acrobat D	7 KB
🔁 EDC Valve List.pdf	10/28/2009 1:18 PM	Adobe Acrobat D	39 KB
🔁 EG Valve List.pdf	10/28/2009 1:19 PM	Adobe Acrobat D	50 KB
🔁 PVC Valve List.pdf	10/28/2009 1:20 PM	Adobe Acrobat D	69 KB
🔁 VCM Valve List.pdf	10/28/2009 1:22 PM	Adobe Acrobat D	231 KB



HI/AI/ COEN

110018925957

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Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700

Point Comfort, TX 77978 Telephone: 361-987-7000

RECEIVE

January 21, 2010

JAN 2 1 2010

Air/Toxics & inspection Coordination Branch 6EN-A

Certified Mail: 7008 1830 0000 9431 0482

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Sir:

Appendix B, Paragraph 3 of the Consent Decree lodged in Civil Action 6:09-cv-00061 requires Formosa to submit to EPA a BWON Compliance Review and Verification Report for the Olefins units located at FPC TX four months after the Date of Lodging. This report is attached.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Enclosure

Cc: Certified Mail: 7008 1830 0000 9431 0499
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, D.C. 20460

Certified Mail: 7008 1830 0000 9431 0505 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, TX 78701

RECEIVE

BENZENE WASTE NESHAP COMPLIANCE REVIEW

JAN 2 1 2010

AND VERIFICATION REPORT FORMOSA PLASTICS CORPORATION POINT COMFORT, TEXAS

Alr/Toxics & inspection Coordination Branch 6EN-A

July 30, 2009

Project #: 529-001-001

SUBMITTED BY: Trihydro Corporation

1252 Commerce Drive, Laramie, WY 82070



ENGINEERING SOLUTIONS. ADVANCING BUSINESS.

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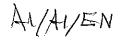
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- D. LABORATORY ANALYTICAL DATA SHEETS
- E. ACRONYMS USED IN REPORT







Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-987-7000

Fax: 361-987-2363

RECEIVE

March 19, 2010

MAR 2 2 2010

Air/Toxics & Inspection Coordination Branch SEN-A

Certified Mail: 7008 1830 0000 9431 1403

Mr. John Blevins
Director, Compliance Assurance and Enforcement Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202 - 2733

RE: Formosa Plastics Corporation, Texas
Revised 2008 Total Annual Benzene (TAB) Report
Consent Decree between U.S. Environmental Protection Agency and
Formosa Civil Action No. 6:09-cv-00061

Dear Mr. Blevins:

Formosa Plastics Corporation, Texas (FPC TX) submits this amended 2008 TAB report in accordance with Appendix B Paragraph 4.a of the Consent Decree between EPA and Formosa Plastics Corporation (Date of Entry: 02/03/2010). This amended report is submitted within 60 days after submission of the Benzene Waste Operations NESHAP (BWON) Compliance Review and Verification Report.

The report has been revised to reflect recent new information that FPC TX obtained after the 2008 TAB Report was submitted. This new information was the result of an internal review and reevaluation of our operations, along with the third party compliance review and verification activities performed in accordance with Appendix B, Paragraph 3 of the Consent Decree.

The Ethylene Dichloride (EDC) Unit has been removed from the 2008 TAB report following a thorough third party sampling event which satisfied BWON's sampling requirements. The EDC BWON sampling event, along with a BWON compliance review, confirmed that benzene is not produced at detectable levels in the EDC production process.

During the same third party BWON sampling event and BWON compliance review, it was determined that the actual benzene waste amounts in the Vinyl Chloride Monomer (VCM) Unit are much lower than those originally reported in the 2008 TAB Report. In addition, four VCM Unit BWON waste streams have been removed from the 2008 TAB Report because they are end of line locations and cause double counting of the benzene quantity in certain VCM streams. Two VCM Unit BWON waste streams were added based on the third party review.

There were no changes to the 2008 TAB quantities reported for the remaining BWON affected sources at FPC TX.

This amended annual report for the period from January 1, 2008 through December 31, 2008 is submitted pursuant to the requirements in 40 CFR 61.357(d) and 40 CFR 63.1095 ("Ethylene MACT") and Appendix B Paragraph 4.a of the Consent Decree.

If you have any questions regarding this report, please contact me at StephanieSchmidt@ftpc.fpcusa.com, or (361)987-8073.

Sincerely,

R. P. Smith

Vice President / General Manager Formosa Plastics Corporation, Texas

Attachments



Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

Fax: 361-987-2363

March 29, 2010

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APR 2 - 2010

Trioxics & Inspection Coordination Branch SEN-A

Certified Mail: 7008 1830 0000 9431 1540

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Sir:

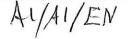
Appendix B, Paragraph 10.a of the Consent Decree lodged in Civil Action 6:09-cv-00061 requires Formosa to submit to EPA a Benzene Waste Operations NESHAP Sampling Plan for FPC TX six months after the Date of Lodging. The sampling plan is attached.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Enclosure







1X417117

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

Fax: 361-987-2363

September 29, 2010

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OCT 1 2010

Air/Toxics & Inspection Coores ation Branch REM-A

EPA Region 6

Certified Mail: 7008 1830 0000 9431 3728

Associate Director, Air Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Re: Consent Decree Civil Action No. 6:09-cv-00061
Appendix A: Enhanced LDAR Program - Initial LDAR Compliance Audits –
Formosa Plastics Corp., Texas, Formosa Plastics Corp., Louisiana, and Formosa Hydrocarbons Company, Inc.

Dears Sir/Madam:

In accordance with the above-referenced action pursuant to Appendix A, subsections J, K and L; enclosed are the Initial Leak Detection and Repair (LDAR) Compliance Audits and Corrective Action Plans for Formosa Plastics Corporation, Texas (FPC TX) and Formosa Plastics Corporation, Louisiana ("FPC LA").

As per Appendix A, Subsection M, paragraph 34.b, Formosa is identifying a problem encountered in complying with the requirement to retain specific records, as stated in Consent Decree paragraph 57b.

Environmental Resource Management ("ERM") of Houston, Texas, an experienced third party LDAR auditor, was retained by Formosa to conduct the required initial LDAR Audit. Despite being provided a copy of Formosa's Consent Decree, ERM failed to preserve specific non-identical records pertaining to the comparative monitoring audit performed by ERM in FPC LA's VCM Unit.

Of the 585 VCM data points monitored during the February 2010 audit within FPC LA's VCM Unit, 69 monitoring event records have not been located by ERM. It is important to note that the 516 records to support the comparative monitoring results identify eight of the eight leaks discovered during the VCM Unit's audit. Thereby, the missing records do not change the outcome. ERM's existing records support that the comparative monitoring ratio of 3.0 was exceeded in FPC LA's VCM Unit; and therefore corrective action is required by Appendix A, Subsection J, paragraph 30.b.

Formosa has initiated corrective actions to ensure that this type of incident does not reoccur.

I, Randy Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

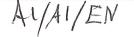
Should you have any questions regarding these reports, please contact Richard O. Quinnette III by email at rquinnette@fpcusa.com or by phone at (973)716-7341.

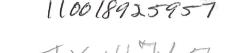
Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Attachments







TX 41747

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

Fax: 361-987-2363

September 29, 2010

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OGT 1 2010

Air/Toxics & Inspection Coore ation Branch

Certified Mail: 7008 1830 0000 9431 3728

EPA Region 6

Associate Director, Air Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Re: Consent Decree Civil Action No. 6:09-cv-00061
Appendix A: Enhanced LDAR Program - Initial LDAR Compliance Audits –
Formosa Plastics Corp., Texas, Formosa Plastics Corp., Louisiana, and Formosa Hydrocarbons Company, Inc.

Dears Sir/Madam:

In accordance with the above-referenced action pursuant to Appendix A, subsections J, K and L; enclosed are the Initial Leak Detection and Repair (LDAR) Compliance Audits and Corrective Action Plans for Formosa Plastics Corporation, Texas (FPC TX) and Formosa Plastics Corporation, Louisiana ("FPC LA").

As per Appendix A, Subsection M, paragraph 34.b, Formosa is identifying a problem encountered in complying with the requirement to retain specific records, as stated in Consent Decree paragraph 57b.

Environmental Resource Management ("ERM") of Houston, Texas, an experienced third party LDAR auditor, was retained by Formosa to conduct the required initial LDAR Audit. Despite being provided a copy of Formosa's Consent Decree, ERM failed to preserve specific non-identical records pertaining to the comparative monitoring audit performed by ERM in FPC LA's VCM Unit.

Of the 585 VCM data points monitored during the February 2010 audit within FPC LA's VCM Unit, 69 monitoring event records have not been located by ERM. It is important to note that the 516 records to support the comparative monitoring results identify eight of the eight leaks discovered during the VCM Unit's audit. Thereby, the missing records do not change the outcome. ERM's existing records support that the comparative monitoring ratio of 3.0 was exceeded in FPC LA's VCM Unit; and therefore corrective action is required by Appendix A, Subsection J, paragraph 30.b.

Formosa has initiated corrective actions to ensure that this type of incident does not reoccur.

I, Randy Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Should you have any questions regarding these reports, please contact Richard O. Quinnette III by email at rquinnette@fpcusa.com or by phone at (973)716-7341.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Attachments

Certification Statement for Formosa Plastics Corporation, Louisiana (FPC LA)

I, Kelly Serio, certify that

- (i) the Facility is in compliance with all applicable LDAR regulations and this ELP;
- (ii) Defendant(s) has completed all corrective actions, if applicable, or is in the process of completing all required Corrective Action; and
- (iii) all equipment at the Facility that is regulated under a federal, state, or local leak detection and repair program has been identified and included in the Facility's LDAR program.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

k∕elly Seriø∕

Vice President/General Manager Formosa Plastics Corp., Louisiana

Certification Statement for Formosa Plastics Corporation Texas (FPC TX) and Formosa Hydrocarbons Company, Inc (FHC).

I, Randall P. Smith, certify that

- the Facilities are in compliance with all applicable LDAR regulations and this ELP;
- (ii) Defendant(s) has completed all corrective actions, if applicable, or is in the process of completing all required Corrective Action; and
- (iii) all equipment at the Facility that is regulated under a federal, state, or local leak detection and repair program has been identified and included in the Facility's LDAR program.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

EPA Headquarters CC:

Certified Mail: 7008 1830 0000 9431 3735

Director, Special Litigation and Projects Division Office of Civil Enforcement

Office of Enforcement and Compliance Assurance U.S Environmental Protection Agency

1200 Pennsylvania Avenue, NW (MC 2248-A)

Washington, DC 20460







Formosa Plastics Corporation, America 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000 Fax: (361) 987-2363

RECEIVE

SEP 5 2011

IT/Texics & Inspection
Coordination Branch

August 31, 2011

Certified Mail: 7008 1830 0000 9417 0154

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On August 17, 2011, FPC TX discovered eleven (11) flanges that had not been added to the LDAR program within one year of the Date of Lodging. While installing new equipment in the area, it was determined that the flanges were in VOC service and must be included in the LDAR program.

Corrective Actions Taken:

Upon discovery, the flanges were entered into the system and monitored per Method 21. The monitoring results showed that the flanges were not leaking.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas



ISO 14001 EMS 35710

✓ Files Currently on the Disc (14)			
🔁 Att XIII - BWON Lab Audit - FPC TX.pdf	1/24/2011 10:42 AM	Adobe Acrobat D	4,8
🔁 Att XIII - BWON Lab Audit - Test America.pdf	1/20/2011 10:18 AM	Adobe Acrobat D	
🔁 Att XVIII - OL I CPI 1st Qtr 2010.pdf	1/24/2011 10:33 AM	Adobe Acrobat D	5
🔁 Att XVIII - OL I CPI 2nd Qtr 2010.pdf	1/24/2011 10:33 AM	Adobe Acrobat D	4
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🔁 Att XVIII - OL I CPI Initial 3.pdf	1/24/2011 10:33 AM	Adobe Acrobat D	4
🔁 Att XVIII - OL I CPI Initial 4.pdf	1/24/2011 10:33 AM	Adobe Acrobat D	5
🔁 Att XVIII - OL II CPI 1st Qtr 2010.pdf	1/24/2011 10:35 AM	Adobe Acrobat D	5
🔁 Att XVIII - OL II CPI 2nd Qtr 2010.pdf	1/24/2011 10:35 AM	Adobe Acrobat D	5
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Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-987-7000 Fax: 361-987-2363

Certified Mail: 7008 1830 0000 9431 5623

RECEIVE

January 28, 2011

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Air/Toxics & inspection Coordination Bransa

EPA Region 6

Dallas, TX 75202

Certified Mail: 7008 1830 0000 9431 56 75 Associate Director, Air Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200

EPA Headquarters Director, Special Litigation and Projects Division Office of Civil Enforcement Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW (MC 2248-A) Washington, DC 20460

> Submittal of Annual Reports Required by Consent Decree Entered on Re: February 3, 2010; Formosa Plastics Corporation, Texas, Formosa Hydrocarbons, Inc., and Formosa Plastics Corporation, Louisiana (Formosa); Civil Action No. 6:09-cv-00061

Dear Madam or Sir:

In accordance with Section VI, Paragraph 23 and Appendix A, Subsection M, Paragraphs 34 and 35 of the above-referenced consent decree; Formosa is submitting its Initial Annual Report (for the Period of 9/29/2009 - 06/30/2010) and its Initial Leak Detection and Repair (LDAR) Annual Compliance Status Report (for the Period of 2/03/2010 -12/31/2010). The reports cover Formosa Plastics Corporation, Texas (FPC TX), Formosa Hydrocarbons, Inc. (FHC) and Formosa Plastics Corporation, Louisiana (FPC LA). The referenced consent decree was lodged on 9/29/2009 and was entered on 2/3/2010.

This submittal consists of individual reports for FPC TX, which includes FHC, and FPC LA. Under the terms of the decree, initial Reports are due to EPA by 1/31/2011.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Should you have any questions regarding these reports, please contact Richard O. Quinnette III by email at rquinnette@fpcusa.com or by phone at (973)716-7341 or Mary Bachynsky by email at mbachynsky@fpcusa.com or phone at (973) 716-7342.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Attachments

Certification Statement for Formosa Plastics Corporation Texas (FPC TX) and Formosa Hydrocarbons Company, Inc (FHC).

I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify that "LDAR trainings in accordance with this Consent Decree have been done" in FPC TX and FHC per Appendix A, Subsection H, Paragraph 22.

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

List of Attachments for CD/LDAR Annual Report FPC TX

- Attachment I Table of Non-Compliances with the Consent Decree (Reference: Consent Decree Paragraph 23b and Appendix A, Subsection M, Paragraph 34a)
- Attachment II Compliance Alternative Choice for Connectors and OELCDs

 That are Currently Regulated but Not Required to Be

 Monitored

 (Reference: Appendix A, Subsection C, Paragraphs 4b and 4e)
- Attachment III Findings and Corrective Actions for LDAR Audit, Including Updates to Any Corrective Actions That are Necessary (Reference: Appendix A, Subsection L, Paragraph 33 and Subsection M, Paragraph 34f)
- Attachment IV "Valve Technology Survey" Commercial Unavailability of a
 Certified Low-Leaking Valve or Certified Low-Leaking Valve
 Packing Technology
 (Reference: Appendix A, Subsection G, Paragraph 20 and
 Appendix A, Subsection M, Paragraph 34c)
- Attachment V Identification of Any Problems Encountered In Complying with the Requirements of Appendix A
 (Reference: Appendix A, Subsection M, Paragraph 34a)
- Attachment VI List of Deviations Identified In the QA/QC Performed Under Subsection I of Appendix A
 (Reference: Appendix A, Subsection M, Paragraph 34e)
- Attachment VII Status of Corrective Action Taken During the Reporting Period (2/3/2010 12/31/2010)
 (Reference: Appendix A, Subsection M, Paragraph 34g)
- Attachment VIII List of Locations Where Carbon Canister Systems Are Used As Control Devices under Subpart FF (Reference: Appendix B, Paragraph 5a)
- Attachment IX Quarterly Uncontrolled Benzene Quantity for Second Quarter 2010 and Projected Uncontrolled Benzene Quantity for 2010 (Reference: Appendix B, Paragraph 10a(3))

List of Attachments for CD/LDAR Annual Report FPC TX

- Attachment X BWON Compliance Review and Verification Report (Reference: Appendix B, Subparagraph 3a)
 Incorporated by Reference
- Attachment XI Amended TAB Report
 (Reference: Appendix B, Subparagraph 4a)
 Incorporated by Reference
- Attachment XII BWON Sampling Plan
 (Reference: Appendix B, Paragraph 13a(8))
 Incorporated by Reference
- Attachment XIII Initial Laboratory Audit Reports
 (Reference: Appendix B, Paragraph 13a(6))
- Attachment XIV Measures Taken to Comply with Training Provisions of Appendix B, Paragraph 9
 (Reference: Appendix B, Paragraph 13a(7))
- Attachment XV Summary of BWON Sampling Results Required Under Subparagraph 10a (Reference: Appendix B, Paragraph 13a(9))
- Attachment XVI Summary of Results from the Quarterly Trend Analysis (Reference: Appendix C, Paragraph 5)
- Attachment XVII LDE Audit Report
 (Reference: Appendix C, Paragraphs 7 & 9)
- Attachment XVIII CPI Sampling Results
 (Reference: Appendix D, Paragraph 1f)
- Attachment XIX Findings and Corrective Actions for TRI Evaluation (Reference: Appendix F, Paragraph 2b)





Formosa Plastics Corporation, America

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November 2, 2011

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Ar/Toxics & Inspection
Coordination Branch
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Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On October 19, 2011, FPC TX discovered that 1395 Valves, 6577 Connectors, 24 Pressure Relief Valves, 3 Pumps, and 2 Compressors had not been added to the LDAR program within one year of the Date of Lodging. While conducting inventory work related to the Green House Gas monitoring rules, it was discovered that this equipment was in VOC service and must be included in the LDAR Program. This area of the unit processes natural gas and was previously believed to be below the VOC content requirement for the LDAR regulations.

Corrective Actions Taken:

Upon discovery, the covered equipment was entered into the system and scheduled for monitoring per Method 21.

Sincerely

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas

of for 12/15







Formosa Plastics Corporation, America 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000

Fax: (361) 987-2363 RECEIVE

November 15, 2011

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Air/Texics & Inspection Coordination Branch

Certified Mail: 7008 1830 0000 9417 1120

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that an incorrect internal leak definition was used when conducting Method 21 inspections of connectors. This situation has been resolved.

Cause of Violation:

On November 1, 2011, FPC TX discovered that the FHC (Formosa Hydrocarbons) Unit's affected connectors, which were monitored within 18 months of the Date of Lodging, were actually monitored with an internal leak definition of 500 ppm VOC, rather than 250 ppm due to a misunderstanding of an FHC exception within the applicable Consent Decree Subsection. This discovery indicated that of the approximately 18,000 affected connectors monitored within 18 months of the Date of Lodging, 145 connectors were impacted by the misunderstood leak definition.

Corrective Actions Taken:

The internal leak definition for connectors in FHC is set at 250 ppm, and all subsequent monitoring conducted in 2011 used this definition.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas





1100189259&7 AILAILEN

IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF TEXAS VICTORIA DIVISION

UNITED STATES OF AMERICA,).
Plaintiff,)
) Civil Action No. 6:09-cv-00061
V.)
FORMOSA PLASTICS CORPORATION,)
TEXAS, FORMOSA HYDROCARBONS)
COMPANY, INC., FORMOSA PLASTICS)
CORPORATION, LOUISIANA,)
Defendants.)
	J

COMPLAINT

Plaintiff, the United States of America, by the authority of the Attorney General of the United States and through the undersigned attorneys, acting at the request of the Administrator of the United States Environmental Protection Agency ("EPA"), files this complaint and alleges as follows:

NATURE OF ACTION

1. Plaintiff brings this action under the Clean Air Act (CAA), 42 U.S.C. § 7401 et seq.; the Clean Water Act (CWA), 33 U.S.C. § 1251 et seq.; the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq.; and the Emergency Planning and Community Right to Know Act (EPCRA), 42 U.S.C. § 11001 et seq. to obtain injunctive relief and civil penalties for violations of each of these statutes, as well as their implementing permits and regulations.

2. This action relates to violations of the CAA, RCRA, CWA, EPCRA, and CERCLA at three chemical manufacturing facilities, Formosa Plastics Corporation, Texas, Formosa Hydrocarbons Company, Inc., and Formosa Plastics Corporation, Louisiana. The subject facilities manufacture a variety of petrochemicals and plastic products.

JURISDICTION, VENUE AND AUTHORITY

- This Court has jurisdiction over the subject matter of this action and over the Parties pursuant to 28 U.S.C. §§ 1331, 1345 and 1355; Section 113(b) of the CAA, 42 U.S.C. § 7413(b); Sections 301, 309 and 402 of the CWA, 33 U.S.C. §§ 1311, 1319 and 1342; Section 3008 of RCRA, 42 U.S.C. § 6928; Sections 304, 313 and 325 of EPCRA, 42 U.S.C. §§ 11004, 11023, and 11045; and Section 113 of CERCLA, 42 U.S.C. § 9613. The Complaint states a claim upon which relief may be granted for injunctive relief and civil penalties against Defendants under the CAA, CWA, RCRA, EPCRA and CERCLA.
- 4. The Southern District of Texas is an appropriate choice of venue in this action pursuant to 28 U.S.C. §§ 1391(b) and (c) and 1395(a), because the Formosa Plastics Corporation, Texas facility is located here and Formosa Plastics Corporation, Texas, Formosa Plastics Corporation, Louisiana, and Formosa Hydrocarbons, Inc. are doing business in this District. This venue is consistent with Section 113(b) of the CAA, 42 U.S.C. § 7413(b); CWA Section 309(b), 33 U.S.C. § 1319(b); RCRA Section 3008(a), 42 U.S.C. 6928(a); EPCRA Section 325(b), 42 U.S.C. § 11045(b); and CERCLA Section 113(b), 42 U.S.C. § 9613(b)...
- 5. Authority to bring this action is vested in the United States Department of Justice pursuant to 28 U.S.C. §§ 516, 519, Section 3008(a) of RCRA, 42 U.S.C. § 6928(a),

Section 309 of the CWA, 33 U.S.C. § 1319, Section 305 of the CAA, 42 U.S.C. § 7605, Section 113 of CERCLA, 42 U.S.C. § 9613, and Section 325 of EPCRA, 42 U.S.C. § 11045.

NOTICE

6. Notice of the commencement of this action has been given to the Texas Commission on Environmental Quality (TCEQ) and the Louisiana Department of Environmental Quality (LDEQ), pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), Section 3008(a)(2) of RCRA, 42 U.S.C. § 6928(a)(2) and Section 309(b) of the CWA, 33 U.S.C. § 1319(b).

DEFENDANTS

- 7. Defendants Formosa Plastics Corporation, Texas ("Formosa Plastics Texas") and Formosa Hydrocarbons, Inc. ("Formosa Hydrocarbons") are corporations organized and existing under the laws of the State of Delaware and doing business in the State of Texas.

 Formosa Plastics Corporation, Louisiana ("Formosa Louisiana") is a corporation organized and existing under the laws of the State of Delaware and doing business in the State of Louisiana.
- 8. This action pertains to the Formosa Plastics Texas facility located at 201 Formosa Drive, Point Comfort Texas, the adjacent Formosa Hydrocarbons facility located at 103 Fannin Road, Point Comfort, Texas, and the Formosa Louisiana facility located on Gulf States Road, Baton Rouge, Louisiana (collectively, the "Facilities"). At all times relevant to this action: Formosa Plastics Texas owned and operated the Formosa Plastics Texas facility, Formosa Hydrocarbons owned and operated the Formosa Hydrocarbons facility (hereinafter Formosa Plastics Texas and Formosa Hydrocarbons will be referred to, collectively, as Formosa Texas), and Formosa Louisiana operated the Louisiana facility.

9. Formosa Texas and Formosa Louisiana are "persons" within the meaning of Section 502(5) of the CWA, 33 U.S.C. § 1362(5), Section 1004(15) of RCRA, 42 U.S.C. § 6903(15), Section 329(7) of EPCRA, 42 U.S.C. § 11047(7), Section 101(21) of CERCLA, 42 U.S.C. § 9601(21), and Section 302(e) of the CAA, 42 U.S.C. § 7602(e).

BACKGROUND

- 10. The Formosa Texas Facility and the Formosa Louisiana Facility manufacture poly vinyl chloride (PVC), a plastic material used in many applications from flexible sheeting to rigid water pipes. The Formosa Texas Facility and the Formosa Louisiana Facility use a suspension resin process in which vinyl chloride monomer (VCM), a carcinogenic gas, and other ingredients are combined in pressure vessels called reactors.
- 11. Polymerization takes place in those reactors, a process in which the molecules of vinyl are linked together to form long chains. These polymer chains form the plastic PVC resin, which is sold as product. In the PVC manufacturing process, medium and heavy hydrocarbons are thermally cracked to form ethylene. Ethylene is converted into ethylene dichloride (EDC) and the EDC is thermally cracked to form VCM. The Formosa Texas Facility is fully integrated in that the manufacturing process begins with the production of ethylene. The Formosa Louisiana Facility is partially integrated, in that the process begins with the production of EDC. The Formosa Louisiana Facility purchases ethylene and chlorine to manufacture EDC.
- 12. In addition to ethylene, EDC, VCM, and PVC, the Formosa Texas Facility also produces a number of other petrochemical products, including polyethylene, ethylene glycol, and polypropylene. Formosa Texas refines and sells as products other byproducts of the ethylene production, such as pyrolysis gas (a mixture of benzene, xylene, and toluene). The

chlorine that the Formosa Texas Facility uses in its EDC production is manufactured onsite in the Chlor/Alkali Unit. The process units (with abbreviations) at the Formosa Texas Facility are as follows: Formosa Hydrocarbons (FHC); Chlor-alkali (C/A); Ethylene dichloride (EDC); Ethylene glycol (EGVOC); Gasoline Hydrotreating (GHU); High density polyethylene (HDPE); High density polyethylene II (HDPE II); Inland division/traffic and C3 (INLANDIV/C3); Linear low-density polyethlene (LLDPE); Marine traffic (MT); Olefins (OLEFINS); Olefins II (OLII); Polypropylene (PPU/PPVOC); Polypropylene II (PPII); Polyvinyl chloride (PVC); and Vinyl chloride monomer (VCM).

- 13. The manufacturing processes create several streams of liquid and sludge wastes. Several of the liquid waste streams at the Formosa Texas Facility contain benzene, a carcinogenic substance.
- 14. In November 2003 and February 2004, teams of EPA inspectors and engineers from Region VI and the National Enforcement Investigation Center, along with representatives of the State of Texas, conducted an inspection of the Texas Facility. In April 2004, a team of EPA inspectors and engineers from Region VI and the National Enforcement Investigation Center, along with representatives of the State of Louisiana, conducted an inspection of the Louisiana Facility. During these inspections, the teams discovered evidence of a number of violations of the environmental statutes and regulations described below.

STATUTORY BACKGROUND

Hazardous Waste (RCRA)

- 15. RCRA establishes a comprehensive program to be administered by the Administrator of EPA for regulating the generation, transportation, treatment, storage, and disposal of hazardous waste. 42 U.S.C. §§ 6901 et seq.
- 16. Pursuant to its authority under RCRA, EPA has promulgated regulations at 40 C.F.R. Part 260 through 272 applicable to generators, transporters, and treatment, storage and disposal facilities. These regulations generally prohibit treatment, storage and disposal of hazardous waste without a permit or equivalent "interim status." They prohibit land disposal of certain hazardous wastes, and provide detailed requirements to govern the activities of those who generate hazardous waste and those who are lawfully permitted to store, treat and dispose of hazardous waste.
- 17. Pursuant to Section 3006 of RCRA, 42 U.S.C. § 6926, the EPA may authorize a state to administer a state hazardous waste program in lieu of the federal program when it deems the state program to be equivalent to the federal program.
- 18. On December 26, 1984, (49 Fed. Reg. 48,300) the State of Texas received final authorization for its base RCRA program and there have been subsequent authorized revisions to said base program.
- 19. On January 25, 1985, (50 Fed. Reg. 3,348) the State of Louisiana received final authorization for its base RCRA program and there have been subsequent authorized revisions to said base program.
- 20. With the addition of Section 3006(g) of RCRA, 42 U.S.C. § 6926(g), new requirements imposed pursuant to the authority of the Solid Waste Disposal Act "SWDA," 42

U.S.C. §§ 6901 to 6992k, are immediately applicable in the authorized States upon the federal effective date.

- 21. The Texas Commission on Environmental Quality ("TCEQ") and the Louisiana Department of Environmental Quality ("LDEQ") are the State agencies designated to carry out the authorized RCRA program in Texas and Louisiana, respectively.
- 22. Specifically, the federal hazardous waste program is managed in the State of Texas pursuant to the Texas Administrative Code ("TEX.ADMIN.CODE") and the rules and regulations promulgated thereunder.
- 23. Specifically, the federal hazardous waste program is managed in the State of Louisiana pursuant to the Louisiana Administrative Code ("LAC") and the rules and regulations promulgated thereunder.
- 24. At all relevant times, Formosa Texas was and continues to be an "owner" and/or "operator" of the Formosa Texas facility and Formosa Louisiana was and continues to be an "owner" and/or "operator" of the Formosa Louisiana facility, within the meaning of 40 C.F.R. § 260.10 and the equivalent corresponding Texas and Louisiana hazardous waste regulations.

 The Facilities generate hazardous waste within the meaning of RCRA and the relevant state hazardous waste regulations.
- 25. Pursuant to Sections 3008(a) and (g) and 3006(g) of RCRA, 42 U.S.C. §§
 6928(a) and (g) and 6926(g), the United States may enforce the federally-approved Texas and
 Louisiana hazardous waste programs, as well as the federal regulations that remain effective in
 Texas and Louisiana by filing a civil action in United States District Court seeking civil penalties
 not to exceed specified amounts for each day of each violation, and injunctive relief.

26. Section 3008(g) of RCRA, 42 U.S.C. § 69289(g), authorizes penalties of up to \$25,000 per day. Pursuant to the Debt Collection Improvement Act of 1996 (28 U.S.C. § 2461), the maximum civil penalty per day for each such violation occurring after January 30, 1997 but before March 16, 2004, has been increased to \$27,500, and the maximum civil penalty per day for each such violation occurring on or after March 16, 2004 has been increased to \$32,500. 40 C.F.R. §§ 19.1-19.4.

Clean Air Act

- 27. The Clean Air Act establishes a regulatory scheme designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).
- 28. Section 111(b)(1)(A) of the Clean Air Act, 42 U.S.C. § 7411(b)(1)(A), requires the Administrator of U.S. EPA to publish a list of categories of stationary sources that emit or may emit any air pollutant. The list must include any categories of sources which are determined to cause or significantly contribute to air pollution which may endanger public health or welfare.
- 29. Section 111(b)(1)(B) of the Clean Air Act, 42 U.S.C. § 7411(b)(1)(B), requires the Administrator of U.S. EPA to promulgate regulations establishing federal standards of performance for new sources of air pollutants within each category of sources listed pursuant to Section 111(b)(1) of the CAA, 42 U.S.C. § 7411(b)(1)(A). For purposes of Section 111 of the Clean Air Act, "new sources" are defined as stationary sources, the construction or modification of which is commenced after publication of regulations or proposed regulations prescribing a standard of performance applicable to such source. 42 U.S.C. § 7411(a)(2).

- 30. Section 112(b) of the Clean Air Act, 42 U.S.C. § 7412(b), lists 188 hazardous air pollutants believed to cause adverse health or environmental effects. Section 112(d) of the Clean Air Act, 42 U.S.C. § 7412(d), requires the Administrator to promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of hazardous air pollutants listed for regulation pursuant to subsection (c) in accordance with the schedules provided in subsection (c) and (e) of Section 112. These standards are known as National Emission Standards for Hazardous Air Pollutants ("NESHAP").
- 31. Section 112(b) of the Clean Air Act, 42 U.S.C. § 7412(b), designates vinyl chloride and benzene as hazardous air pollutants.
- 32. The term "stationary source" is defined at Section 111(a)(3) of the Clean Air Act, 42 U.S.C. § 7411(a)(3), to mean any facility which emits or may emit any air pollutant.
- 33. Sections 111(a)(5) and 112(a)(9) of the Clean Air Act, 42 U.S.C. §§ 7411(a)(5) and 7412(a)(9), define "owner or operator" as any person who owns, leases, operates, controls, or supervises a stationary source.
- 34. EPA established emission standards for vinyl chloride by regulation, 40 C.F.R. Part 61, Subpart F (§§ 61.60 to 61.71) (the "Vinyl Chloride NESHAP").
- 35. EPA established emission standards applicable to benzene-containing wastewaters, 40 C.F.R. Part 61, subparts FF ("Benzene Waste Operations NESHAP"). Benzene is a naturally-occurring constituent of petrochemical products and petrochemical waste and is highly volatile.

- 36. The Formosa Texas and Formosa Louisiana Facilities are "stationary sources" within the meaning of Sections 111(a), 112(a), and 302(z) of the CAA, 42 U.S.C. §§ 7611(a), 7612(a), and 7602(z).
- 37. The Formosa Texas and Formosa Louisiana Facilities are "major sources" as defined in Section 112(a) of the CAA, 42 U.S.C. § 7612(a).
- 38. Section 113 of the Clean Air Act, 42 U.S.C. § 7413, authorizes EPA to commence a civil action for injunctive relief and civil penalties against any person who has violated any requirement or prohibition of the Clean Air Act or regulations promulgated thereunder, such as violations of a New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants, or who has violated any applicable permit or implementation plan.
- 39. Title V of the Clean Air Act, 42 U.S.C. §§ 7661-7661e, established an operating permitting program designed to include all applicable requirements of the Clean Air Act into a single permit, and to provide for permitting for sources of hazardous air pollutants. Section 502 of the Clean Air Act required states to submit an approvable Title V permitting program before November 15, 1993, and allowed EPA to approve on an interim basis programs that substantially meet the requirements of Title V. 42 U.S.C. § 7661(g). Pursuant to Section 502, the Administrator has promulgated regulations at 40 C.F.R. Part 70 setting forth the minimum requirements for an approvable Title V program. 57 Fed. Reg. 32295 (July 21, 1992).
- 40. Texas received source category-specific interim approval of its Title V program July 25, 1996, and received final full approval effective November 30, 2001.
 - 41. Louisiana's Title V program became effective on October 12, 1995.

- 42. Formosa Texas owns and operates affected facilities subject to the requirements of the following requirements, which include LDAR standards: 40 C.F.R. Part 60, subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry); subpart F (National Emission Standard for Vinyl Chloride), and subpart V (National Emission Standard for Equipment Leaks (Fugitive Emissions Sources); and 40 C.F.R. Part 63, subpart H (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks).
- 43. Formosa Louisiana owns and operates affected facilities subject to the following requirements, which include LDAR standards: 40 C.F.R. Part 60, subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry); subpart F (National Emission Standard for Vinyl Chloride), and subpart V (National Emission Standard for Equipment Leaks (Fugitive Emissions Sources); and 40 C.F.R. Part 63, subpart H (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks)
- 44. Pursuant to Section 111(b)(1), 42 U.S.C. § 7411(b)(1), U.S. EPA promulgated New Source Performance Standards ("NSPS") for Equipment Leaks of VOC in Synthetic Organic Chemical Manufacturing Industry (SOCMI). The NSPS for Equipment Leaks of Volatile Organic Compounds ("VOCs") in SOCMI apply to any "affected facility" for which construction or modification commenced after January 5, 1981. The NSPS for Equipment Leaks of VOCs in SOCMI are set forth at Subpart VV of Part 60 of Title 40, 40 C.F.R. §§ 60.590 through 60.593.

- 45. Under Subpart VV, an "affected facility" includes each group of all the "equipment" within a "process unit." 40 C.F.R. § 60.480(a)(2). For purposes of Subpart VV "equipment" is defined as "each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in VOC service." 40 C.F.R. § 60.481. For purposes of Subpart VV, "process unit" is defined as components assembled to produce, as intermediate or final products, one or more of the chemicals listed in § 60.489 of subpart VV. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product. 40 C.F.R. § 40.481.
- 46. The Formosa Texas and Formosa Louisiana Facilities, respectively, contains one or more process units that produce one or more of the chemicals listed in 40 C.F.R. § 60.489.
- 47. Pursuant to Section 112(d) of the Clean Air Act, 42 U.S.C. § 7412(d), U.S. EPA promulgated the Vinyl Chloride NESHAP, 40 C.F.R. Part 61, subpart F. Pursuant to 40 C.F.R. § 61.60, the provisions of 40 C.F.R. Part 61, subpart F, apply to plants that produce (1) ethylene dichloride by reaction of oxygen and hydrogen chloride with ethylene, (2) vinyl chloride by an process, and/or (3) one or more polymers containing any fraction of polymerized vinyl chloride.
- 48. The Formosa Texas and Formosa Louisiana Facilities contain one or more process units that are subject to the Vinyl Chloride NESHAP because they produce (1) ethylene dichloride by reaction of oxygen and hydrogen chloride with ethylene, (2) vinyl chloride by an process, and/or (3) one or more polymers containing any fraction of polymerized vinyl chloride.

- 49. Pursuant to Section 112(d) of the Clean Air Act, 42 U.S.C. § 7412(d), U.S. EPA promulgated the NESHAP for Equipment Leaks (Fugitive Emission Sources), 40 C.F.R. Part 61, subpart V. Pursuant to 40 C.F.R. § 61.240, the NESHAP for Equipment Leaks applied to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by 40 C.F.R. Part 61, subpart V. Pursuant to 40 C.F.R. § 61.241, VHAP means a substance regulated under 40 C.F.R. Part 61 for which a standard for equipment leaks of the substance has been proposed and promulgated. Pursuant to 40 C.F.R. § 61.241, benzene and vinyl chloride are VHAPs.
- 50. The Formosa Texas and Formosa Louisiana Facilities contain one or more process units containing sources that are intended to operate in VHAP service, including sources that are intended to operate in benzene and vinyl chloride service.
- 51. Pursuant to Section 112(d) of the Clean Air Act, 42 U.S.C. § 7412(d),
 U.S. EPA promulgated the National Emission Standard for Organic Hazardous Air Pollutants for
 Equipment Leaks, 40 C.F.R. Part 63, subpart H (the "Hazardous Organic NESHAP" or "HON").
 Pursuant to 40 C.F.R. § 63.160(a), subpart H applies to pumps, compressors, agitators, pressure
 relief devices, sampling connection systems, open-ended valves or lines, valves, connectors,
 surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed
 vent systems required by subpart H that are intended to operate in organic hazardous air
 pollutant service 300 hours or more during the calendar year within a source subject to the
 provisions of a specific subpart in 40 C.F.R. Part 63 that references subpart H. After the

compliance date for a process unit, equipment to which subpart H applies that also are subject to the provisions or 40 C.F.R. Part 60 and/or 40 C.F.R. Part 61 are required to comply only with the provisions of subpart H. 40 C.F.R. § 63.160(b).

- 52. If a process unit subject to the provisions of 40 C.F.R. Part 63, subpart H, has equipment to which subpart H does not apply, but which is subject to 40 C.F.R. Part 60, subpart VV, GGG, or KKK, 40 C.F.R. Part 61, subpart F or J, or 40 C.F.R Part 264, subpart BB or 40 C.F.R Part 265, subpart BB, the owner or operator may elect to apply subpart H to all such equipment in the process unit. If the owner or operator elects this method of compliance, all VOC in such equipment shall be considered, for purposes of applicability and compliance with subpart H, as if it were organic hazardous air pollutant (HAP). Compliance with the provisions of subpart H, in this manner is deemed to constitute compliance with the standards contained in 40 C.F.R. Part 60, subpart VV, GGG, or KKK, 40 C.F.R. Part 61, subpart F or J, or 40 C.F.R. Part 264, subpart BB or 40 C.F.R. Part 265, subpart BB. 40 C.F.R. § 63.160(c).
- 53. The Formosa Texas and Formosa Louisiana Facilities each contain equipment intended to operate in organic hazardous air pollutant service 300 hours or more during with calendar year within a source subject to the provisions of a specific subpart in 40 C.F.R. Part 63 that references subpart H, or that are otherwise subject to the requirements of 40 C.F.R. Part 63, subpart H.
- 54. EPA may bring a civil action pursuant to Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b), for injunctive relief and/or civil penalties of up to \$25,000 per day for each violation of the Clean Air Act. The Debt Collection Improvement Act, 31 U.S.C. § 3701 et. seq., requires EPA to periodically adjust its civil penalties for inflation. On December 31, 1996

and February 13, 2004, EPA adopted regulations entitled "Adjustment of Civil Monetary Penalties for Inflation," 40 C.F.R. Part 19, which provide that the maximum civil penalty should adjust up to \$27,500 per day for each violation that occurs from January 31, 1997 through March 14, 2004 and \$32,500 per day for each violation that occurs on or after March 15, 2004.

Clean Water Act

- 55. Section 301(a) of the Clean Water Act ("CWA"), 33 U.S.C. § 1311(a) prohibits the "discharge of pollutants" except in compliance with certain sections of the CWA, including Sections 301 and 402, 33 U.S.C. §§ 1311 and 1342.
- 56. The term "discharge of pollutants" is defined in Section 502(12) of the CWA, 33 U.S.C. § 1362(12), to mean "any addition of any pollutant to navigable waters from any point source...."
- 57. The term "navigable waters" is defined in Section 502(7) of the CWA, 33 U.S.C. § 1362(7), to mean "the waters of the United States, including the territorial seas."
- 58. The term "point source" is defined in Section 502(14) of the CWA, 33 U.S.C. § 1362(14), to mean "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnelfrom which pollutants are or may be discharged."
- 59. Section 402(a) of the CWA, 33 U.S.C. § 1342(a), provides that the Environmental Protection Agency ("EPA") may issue National Pollutant Discharge Elimination System ("NPDES") permits to "persons" that authorize the discharge of any pollutant into navigable waters, but only in compliance with Section 301 of the CWA, 33 U.S.C. § 1311, and such other conditions as EPA determines are necessary to carry out the provisions of the CWA.

- 60. At all times relevant hereto, the Facilities have discharged, and continue to discharge, "pollutants" from the Facility through "point sources" into "navigable waters," as each of these terms is defined in the Section 502 of the CWA, 33 U.S.C. § 1362.
- 61. Section 402(b) of the CWA, 33 U.S.C. § 1342(b), provides that a State may establish its own permit program and, after receiving approval of its program by the EPA, may issue NPDES permits.
- 62. EPA has approved Texas's program for issuance of NPDES permits.

 Under that program, Texas issued TPDES Permit No. 02436 (EPA I.D. No. TX0085570) to

 Formosa Texas. That permit includes, *inter alia*, limits on the discharge of certain pollutants and requirements for control of storm water run-off. EPA has approved Louisiana's program for issuance of NPDES permits. Under that program, Louisiana issued LPDES Permit No.

 LA0006149 (EPA I.D. No. LA0006149) to Formosa Texas. Those permits include, *inter alia*, limits on the discharge of certain pollutants and requirements for control of storm water run-off.
- 63. Section 309(b) of the CWA, 33 U.S.C. § 1319(b), authorizes commencement of a civil action for appropriate relief, including a permanent or temporary injunction, when any person is in violation of Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, 33 U.S.C. §§ 1311, 1312, 1316, 1317, 1318,1328 or 1345, or is in violation of any permit condition or limitation implementing any of those sections in a permit under Section 402 of the CWA, 33 U.S.C. § 1342.
- 64. Section 309(d) of the Act, 33 U.S.C. § 1319(d), provides that any person who violates Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA, 33 U.S.C. §§ 1311, 1312, 1316, 1317, 1318, 1328 or 1345, in violation of any permit condition or limitation

implementing any of those sections in a permit issued under Section 402 of the CWA, 33 U.S.C. § 1342, shall be subject to a civil penalty not to exceed \$25,000 per day for each violation.

65. Pursuant to the Debt Collection Improvement Act of 1996 (28 U.S.C. § 2461), after March 15, 2004, any person who violates Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA, 33 U.S.C. §§ 1311, 1312, 1316, 1317, 1318, 1328 or 1345, or is in violation of any permit condition or limitation implementing of any those sections in a permit issued under Section 402 of the CWA, 33 U.S.C. § 1342, shall be subject to a civil penalty not to exceed \$32,500 per day for such violation. See 69 Fed. Reg. 7121 (Feb. 13, 2004).

Reporting Requirements (CERCLA/EPCRA)

- 66. The Emergency Planning and Community Right-to-Know Act ("EPCRA") provides communities with information on potential chemical hazards within their boundaries and fosters state and local emergency planning efforts to control any accidental releases.

 Emergency Planning and Community Right-to-Know Programs, Interim Final Rule, 51 Fed.Reg. 41,570 (Nov. 17, 1986).
- 67. EPCRA imposes and mandates notification requirements on industrial and commercial facilities and requires the creation of state emergency response commissions and local emergency planning committees. EPCRA establishes a framework of state, regional, and local agencies designed to inform the public about the presence of hazardous and toxic chemicals, and to provide for emergency response in the event of health-threatening release. The local emergency planning committees are charged with developing emergency responses plans based on the information provided by facilities. Sections 301-303 of EPCRA, 42 U.S.C. §§ 11001-11003.

- Administrator of EPA to publish a list of Extremely Hazardous Substances ("EHSs") which, when released into the environment, may present substantial danger to public health or welfare or the environment, and to promulgate regulations establishing that quantity of any EHS, the release of which shall be required to be reported under Sections 304(b) and 304(c) of EPCRA, 42 U.S.C. §§ 11004(b) and (c) ("Reportable Quantity" or "RQ"). The list of RQs for extremely hazardous substances is codified at 40 C.F.R. Part 355. Appendices A and B.
- 69. Under Section 313 of EPCRA, 42 U.S.C. § 11023, and the regulations promulgated thereunder, Formosa Texas, Formosa Hydrocarbons, and Formosa Louisiana are required annually to calculate and report to EPA various data regarding toxic chemicals at their respective facilities during the preceding year. Such data must include the "annual quantity of the toxic chemical entering each environmental medium." 42 U.S.C. § 11023 (g)(1)(c)(iv).
- 70. Section 329(4) of EPCRA, 42 U.S.C. § 11029(4), and 40 C.F.R. § 372.3 define "facility" to mean, in relevant part, "all buildings, equipment, structures and other stationary items which are located on a single site ... and which are owned or operated by the same person."
- 71. At all times relevant hereto, the Facilities have stored, and continue to store, at the Facilities "hazardous substances" within the meaning of Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- 72. At all times relevant hereto, the Facilities have stored, and continue to store, at the Facilities "extremely hazardous substances" as defined in Section 302(a) of EPCRA, 42 U.S.C. § 11002(a).

73. Section 325(c) of EPCRA, 42 U.S.C. § 11045(c), authorizes penalties of up \$25,000 per day for violations of the Act. Pursuant to the Debt Collection Improvement Act of 1996 (28 U.S.C. § 2461), the maximum civil penalty per day for each such violation occurring after January 30, 1997 but before March 16, 2004, is increased to \$27,500, and the maximum civil penalty per day for each such violation occurring on or after March 16, 2004 is increased to \$32,500. 40 C.F.R. §§ 19.1-19.4.

CLAIMS FOR RELIEF

Formosa Texas

CLEAN AIR ACT

74. Paragraphs 1 through 14 and 27 through 54 are realleged and incorporated herein by reference.

BENZENE WASTE OPERATIONS NESHAP CLAIMS

75. The provisions of the Benzene Waste Operation NESHAP, 40 C.F.R. Part 61, subpart FF, are applicable to owners and operators of chemical manufacturing plants, coke byproduct recovery plants, and petroleum refineries. A chemical manufacturing plant is any facility engaged in the production of chemicals by chemical, thermal, physical, or biological processes for use as a product, co-product, by-product, or intermediate including but not limited to industrial organic chemicals, organic pesticide products, pharmaceutical preparations, paint and allied products, fertilizers, and agricultural chemicals. Examples of chemical manufacturing plants include facilities at which process units are operated to produce one or more of the following chemicals: benzenesulfonic acid, benzene, chlorobenzene, cumene, cyclohexane,

ethylene, ethylbenzene, hydroquinone, linear alklylbenzene, nitrobenzene, resorcinol, sulfolane, or styrene. 40 C.F.R. § 61.341.

- 76. Formosa Texas operates a chemical manufacturing plant as defined at 40 C.F.R. § 61.341 and therefore is subject to the requirements of 40 C.F.R. Part 61, subpart FF.
- 77. Based on the EPA inspection findings, reports, and further investigation, Formosa Texas has violated provisions of 40 C.F.R. Part 61, subpart FF.

FIRST CLAIM FOR RELIEF

(Failure to Submit Compliance Certification)

- 78. Pursuant to 40 C.F.R. § 61.357(d)(1), if the total annual benzene ("TAB") quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the owner or operator shall submit to EPA within 90 days after January 7, 1993, unless a waiver of compliance is granted, or by the date of initial startup for a new source with an initial startup after the effective date, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in compliance with 40 C.F.R. Part 61, subpart FF.
- 79. For Reporting Years 2000 and 2001, Formosa reported TAB values of 10.44 Mg and 10.68 Mg, respectively. For Reporting Year 2002, during which the OLII process unit re-started operation, Formosa reported a TAB value of 30.18 Mg.
- 80. Formosa therefore was required to submit to EPA a certification that the equipment necessary to comply with the standards had been installed and that the required initial inspections or test had been carried out in accordance with 40 C.F.R. Part 61, subpart FF.
- 81. Formosa violated 40 C.F.R. § 61.357(d)(1) by failing to submit the required certification.

SECOND CLAIM FOR RELIEF

(Failure to Sample Waste Streams at Proper Point of Generation)

- 82. 40 C.F.R. § 61.355 (b) requires that an owner or operator, for purposes of calculating the TAB, determine the annual waste quantity at the point of generation, unless otherwise provided in 40 C.F.R. §§ 61.355 (b)(1), (2), (3), and (4), by one of the methods given in 40 C.F.R. §§ 61.355 (b)(5) through (b)(7).
- 83. Pursuant to 40 C.F.R. § 61.341, point of generation means the location where the waste stream exits the process unit component or storage tank prior to handling or treatment in an operation that is not an integral part of the production process or in the case of waste management units that generate new wastes after treatment, the location where the waste stream exits the waste management unit component.
- 84. Formosa Texas violated 40 C.F.R. § 61.355(b) by failing to sample each waste stream at the proper point of generation.
- 85. Unless restrained by order of this Court, Formosa Texas will continue to violate 40 C.F.R. § 61.355 (b) and the CAA.

THIRD CLAIM FOR RELIEF

(Failure to Maintain Wastewater Treatment System Certification)

- 86. Pursuant to 40 C.F.R. § 61.356(e), an owner or operator using a treatment process or wastewater treatment system unit in accordance with 40 C.F.R. § 61.348 shall maintain for the life of the unit the documents listed in 40 C.F.R. § 61.356(e)(1) through (4).
- 87. Pursuant to 40 C.F.R. § 61.356(e)(1), an owner or operator shall prepare a statement signed and dated, certifying that the unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow

rate and the benzene content expected to occur. The owner or operator is required to keep a copy of this certification for the life of the unit.

88. Formosa violated 40 C.F.R. § 61.356(e)(1) by failing to maintain the required certification stating that its wastewater treatment system unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur.

FOURTH CLAIM FOR RELIEF

(Failure to Maintain Documentation of Wastewater Treatment System Performance)

- 89. Pursuant to 40 C.F.R. § 61.356(e)(2), if engineering calculations are used to determine the treatment process or wastewater system unit performance, then the owner or operator shall maintain the complete design analysis for the unit. The design analysis shall include for example the following information: Design specifications, drawings, schematics, piping and instrumentation diagrams, and other documentation necessary to demonstrate the unit performance.
- 90. Formosa Texas violated 40 C.F.R. § 61.356(e)(2) by failing to maintain necessary documents to determine wastewater treatment system unit performance.
- 91. Unless restrained by order of this Court, Formosa Texas will continue to violate 40 C.F.R. § 61.356(e)(2) and the CAA.

FIFTH CLAIM FOR RELIEF

(Failure to Maintain Records to Verify No Detectable Emissions)

92. Pursuant to 40 C.F.R. § 61.356(h), an owner or operator shall maintain a record for each test of no detectable emissions required by 40 C.F.R. §§ 61.343 through 61.347 and 61.349. 40 C.F.R. § 61.356(h) provides that the record will include the following

information: date the test is performed, background level measured during test, and maximum concentrations indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

- 93. Formosa Texas violated 40 C.F.R. § 61.356(h) by failing to maintain the required records to verify no detectable emissions from each potential emissions point.
- 94. Unless restrained by an Order of the Court, these and similar violations of the CAA and the implementing regulations will continue.
- 95. Unless restrained by order of this Court, Formosa Texas will continue to violate 40 C.F.R. § 61.356(h) and the CAA.

LEAK DETECTION AND REPAIR CLAIMS

SIXTH CLAIM FOR RELIEF

(Failure to Monitor Valves in the First Month of the Quarter)

- 96. LDAR standards in 40 C.F.R. § 60.482-7(c)(1) and 40 C.F.R. § 61.242-7(c)(1) apply to valves in gas and vapor service and light liquid service in the PPU unit, and LDAR standards in 40 C.F.R. § 60.482-7(c)(1) apply to apply to valves in gas and vapor service and light liquid service in the HDPE II unit.
- 97. Pursuant to 40 C.F.R. § 60.482-7(a) and 40 C.F.R. § 61.242-7(a), each valve in gas or vapor service and in light liquid service must be monitored monthly to detect leaks by the methods specified in §§ 60.485(b) and 61.245, respectively.

- 98. Pursuant to 40 C.F.R. § 60.482-7(c)(1) and 40 C.F.R. § 61.242-7(c)(1), any valve for which a leak is not detected for two (2) consecutive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
- 99. Formosa Texas monitored valves in the PPU unit in the second month of the third quarter of 2001 and monitored valves in the HDPE II unit in the second month of the fourth quarter of 2002.
- 100. Formosa Texas violated 40 C.F.R. § 60.482-7(c)(1) and 40 C.F.R. § 61.242-7(c)(1) by failing to monitor valves in at least two (2) process units in the first month of the quarter.

SEVENTH CLAIM FOR RELIEF

(Failure to Monitor Valves after Leaks Detections)

- 101. LDAR standards in 40 C.F.R. § 60.482-7(c) apply to valves in gas and vapor service and light liquid service in the Formosa Texas FHC, HDPE, HDPEII, LLDPE, MT, OLEFINS, OLII, PPU, and PPII units.
- 102. Pursuant to 40 C.F.R. § 60.482-7(c)(2), if a leak is detected in a valve eligible for quarterly monitoring pursuant to 40 C.F.R. § 60.482-7(c)(1) (because no leak was detected for 2 successive months), the valve shall be monitored monthly until a leak is not detected for two consecutive months.
- 103. Formosa Texas violated 40 C.F.R. § 60.482-7(c)(2) by failing, after a leak was detected, on at least 50 occasions during 2001, 2002, and 2003, to monitor light-liquid or gaseous service valves monthly until a leak was not detected for 2 consecutive months.

EIGHTH CLAIM FOR RELIEF

(Failure to Make First Attempts at Repair of Leaking Valves)

- 104. LDAR standards in 40 C.F.R. § 60.482-7(d) apply to valves in gas and vapor service and light liquid service in the Formosa Texas OLEFINS, OLII, GHU, PPU/PPVOC, EDC, EGVOC, MT, FHC, VCM, HDPE, and HDPEII units. LDAR standards in 40 C.F.R. § 61.242-7(d) apply to valves in gas and vapor service and light liquid service in the Formosa Texas OLEFINS, OLII, PPU/PPVOC, MT, and VCM units. LDAR standards in 40 C.F.R. § 63.168(f) apply to valves in gas and vapor service and light liquid service in the Formosa Texas EDC, EGVOC, and MT units.
- 105. Pursuant to 40 C.F.R. §§ 60.482-7(d)(2), 61.242-7(d)(2), 63.168(f)(2), a first attempt at repair shall be made no later than 5 days after each leak is detected.
- 106. Pursuant to Pursuant to 40 C.F.R. §§ 60.482-7(e), 60.242-7(e), and 63.168(g), first attempts at repair include, but are not limited to, the following best practices where applicable: (1) tightening of bonnet bolts; (2) replacement of bonnet bolts; (3) tightening of packing gland nuts; (4) injection of lubricant into lubricated packing.
- 107. Formosa Texas violated 40 C.F.R. §§ 60.482-7(d)(2), 61.242-7(d)(2), 63.168(f)(2) by failing to, on at least 24 occasions during 2001, 2002, and 2003, make a first attempt at repair within 5 calendar days of detecting a leak.
- 108. Unless restrained by order of this Court, Formosa Texas will continue to violate 40 C.F.R. §§ 60.482-7(d)(2), 61.242-7(d)(2), 63.168(f)(2) and the CAA.

NINTH CLAIM FOR RELIEF

(Failure to Make Final Repairs of Leaking Valves)

- 109. LDAR standards in 40 C.F.R. § 60.482-7(d) apply to valves in gas and vapor service and light liquid service in the Formosa Texas OLEFINS, GHU, PPII, MT, FHC, VCM, HDPE, and HDPEII units. LDAR standards in 40 C.F.R. § 61.242-7(d) apply to valves in gas and vapor service and light liquid service in the Formosa Texas OLEFINS, MT, and VCM units. LDAR standards in 40 C.F.R. § 63.168(f) apply to valves in gas and vapor service and light liquid service in the Formosa Texas MT and VCM units
- 110. Pursuant to 40 C.F.R. §§ 60.482-7(d)(1), 61.242-7(d)(1), and 63.168(f)(1), when a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 C.F.R. § 60.482-9.
- 111. Formosa Texas violated 40 C.F.R. §§ 60.482-7(d)(1), 61.242-7(d)(1), and 63.168(f)(1) by not repairing a detected leak as soon as practicable, but not later than 15 calendar days after the leak was detected.
- 112. Unless restrained by order of this Court, Formosa Texas will continue to violate 40 C.F.R. §§ 60.482-7(d)(1), 61.242-7(d)(1), and 63.168(f)(1) and the CAA.

TENTH CLAIM FOR RELIEF

(Failure to Properly Calculate Leak Rates)

- 113. LDAR standards in 40 C.F.R. Part 63, subpart H, apply to valves, flanges and connectors, pumps, compressors, and agitators in the Formosa Texas VCM unit, and to valves, flanges, and connectors in the Formosa Texas EDC, EGVOC, MT, and GHU units.
- 114. Pursuant to 40 C.F.R. § 63.160(a), valves, flanges, connectors, pumps, compressors, agitators, and other types of equipment, that are intended to operate in organic

hazardous air pollutant service for 300 hours or more during the calendar year within a source are subject to the provisions of specific subpart in 40 C.F.R., Part 63, that reference subpart H.

- 115. Pursuant to 40 C.F.R. § 63.168(b), the owner or operator of a source subject to 40 C.F.R. Part 63, subpart H, shall monitor all required equipment, except as provided in 40 C.F.R. § 63.162(b) of subpart H and 40 C.F.R. §§ 63.168 (h) and (i) at the intervals specified in 40 C.F.R. § 63.168(c) and (d) and shall comply with all other provisions of 40 C.F.R. § 63.168, except as provided in 40 C.F.R. §§ 63.171, 63.177, 63.178, and 63.179.
- 116. 40 C.F.R. § 63.168(d) sets forth the intervals that the owner or operator shall monitor for leaks using the calculation for percent leaking valves as determined by 40 C.F.R. § 63.168(e).
- 117. Pursuant 40 C.F.R. § 63.168(e)(2), percent leaking equipment shall be calculated as a rolling average for two consecutive monitoring periods for monthly, quarterly, or a semiannual monitoring program.
- 118. Formosa Texas monitors its equipment subject to 40 C.F.R. Part 63, subpart H, on a monthly basis. A review of the Formosa's semiannual report from January 17, 2001 to July 24, 2003, demonstrated that Formosa had not calculated its percent leaking equipment as a rolling average for two consecutive monitoring periods.
- 119. Therefore, Formosa Texas has violated 40 C.F.R. § 63.168(e)(2) by failing to calculate its leak percentage as a rolling average for two consecutive monitoring periods.

ELEVENTH CLAIM FOR RELIEF

(Failure to Close Open-ended Line)

120. LDAR standards in 40 C.F.R. § 60.482-6 apply to the Formosa Texas HDPE unit.

- 121. Pursuant to 40 C.F.R. § 60.482-6(a)(1), each open-ended valve or line shall be equipped with a valve, plug, cap, or other device, subject to certain exceptions.
- 122. Formosa Texas failed to close at least one open-ended line in the HDPE unit with a valve plug, cap, or other device, as required by 40 C.F.R. § 60.482-6(a)(1).
- 123. Therefore, Formosa Texas has violated 40 C.F.R. § 60.482-6(a)(1) by failing to close at least one open-ended line in the HDPE unit with a valve plug, cap, or other device.

TWELFTH CLAIM FOR RELIEF

(Failure to Monitor Components)

- 124. LDAR standards in 40 C.F.R. § 60.482-7(a) apply to equipment in the Formosa Texas LLDPE and HDPE units.
- 125. Pursuant to 40 C.F.R. § 60.482-7(a), each valve in gas/vapor service and in light liquid service must be monitored monthly to detect leaks, subject to certain exceptions.
- 126. According to Formosa Texas estimates, at the time of the EPA inspections, Formosa Texas had failed to monitor over 500 valves in the LLDPE and HDPE units since the third quarter of calendar year 2000.
- 127. Therefore, Formosa violated 40 C.F.R. § 60.482-7(a) by failing to monitor components in gas/vapor service and in light liquid service.
- 128. Unless restrained by order of this Court, Formosa Texas will continue to violate 40 C.F.R. § 60.482-7(a) and the CAA.

THIRTEENTH CLAIM FOR RELIEF

(Failure to Monitor in Accordance with EPA Method 21)

- 129. LDAR standards in 40 C.F.R. § 60.482-7(a) apply to equipment in the Formosa Texas VCM, PVC, OLEFINS, MT, LLDPE, HDPE, and PPII units. LDAR standards in 40 C.F.R. § 61.242-7 apply to equipment in the Formosa Texas VCM, PVC, OLEFINS, and MT units. LDAR standards in 40 C.F.R. § 63.168(b)(1) apply to equipment in the Formosa Texas VCM and MT units.
- 130. Pursuant to 40 C.F.R. § 60.482-7(a), 40 C.F.R. § 242-7, and 40 C.F.R. § 63.168(b)(1), all equipment subject to 40 C.F.R. Part 60, Subpart VV; 40 C.F.R. Part 61, Subpart V; and 40 C.F.R. Part 63, Subparts H and UU must be monitored in accordance with Method 21 of 40 C.F.R. Part 60, Appendix A.
- 131. Based on comparative monitoring conducted by EPA inspectors, and EPA inspectors' observations of Formosa LDAR monitoring, at the time of the EPA Inspection,

 Formosa Texas has failed to comply with Method 21 in at least seven (7) process units at the

 Formosa Texas Facility: VCM, PVC, OLEFINS, MT, LLDPE, HDPE, and PPII.
- Therefore, Formosa Texas has violated 40 C.F.R. §§ 60.482-7(a), 60.242-7, and 63.168(b)(1), by failing to monitor all equipment subject to 40 C.F.R. Part 60, Subpart VV; 40 C.F.R. Part 61, Subpart V; and 40 C.F.R. Part 63, Subparts H and UU in accordance with Method 21 of 40 C.F.R. Part 60, Appendix A.
- 133. Unless restrained by order of this Court, Formosa Texas will continue to violate 40 C.F.R. §§ 60.482-7(a), 60.242-7, and 63.168(b)(1) and the CAA.

VINYL CHLORIDE NESHAP VIOLATIONS

134. Formosa Texas owns and operates an affected facility subject to the requirements of 40 C.F.R. Part 61, Subparts A and F (National Emission Standard for Vinyl Chloride).

FOURTEENTH CLAIM FOR RELIEF

(Failure to Comply with Approved Leak Detection and Elimination Program)

- 135. Pursuant to 40 C.F.R. § 61.65(b)(8)(i) an owner or operator of a vinyl chloride plant must minimize vinyl chloride emissions due to leaks from equipment in vinyl chloride service by, among other things, operating a reliable and accurate vinyl chloride monitoring system for detection of major leaks and identification of the general area of the plant where a leak is located. A vinyl chloride monitoring system means a device which obtains air samples from one or more points on a continuous sequential basis and analyzes the samples.
- 136. Pursuant to 40 C.F.R. § 61.65(b)(8)(i), the vinyl chloride monitoring system shall be operated according to a program developed by the plant owner or operator ("LDE Program").
- 137. At the time of EPA's inspections of the Formosa Texas Facility, Formosa had a LDE Program, which had been approved by the TCEQ.
- 138. The Formosa Texas LDE Program defined a leak as any monitor reading of 1 ppm VCM or greater.
- 139. During the on-site EPA inspection, EPA inspectors observed software settings in the Formosa Texas LDE Program which reported a leak only when two consecutive readings, separated by 20 to 30 minutes, equal to or greater than 1 ppm VCM from the same sample location, were recorded.

- 140. 40 C.F.R. § 61.65(b)(8)(i)(D) requires that an LDE Program provide for an acceptable calibration and maintenance schedule for the vinyl chloride monitoring system and portable hydrocarbon detector; and, for the vinyl chloride monitoring system, a daily span check is to be conducted with a concentration of vinyl chloride equal to the concentration defined as a leak under the LDE Program.
- 141. Formosa Texas used a 10 ppm VCM gas to perform its daily calibrations despite the fact that the Formosa Texas LDE Program defined a leak as 1 ppm VCM.
- 142. Formosa Texas has violated 40 C.F.R. § 61.65(b)(8)(i) by failing to comply with the requirements of its LDE Program.
- 143. Unless restrained by order of this Court, Formosa Texas will continue to violate 40 C.F.R. § 61.65(b)(8)(i) and the CAA.

RESOURCE CONSERVATION AND RECOVERY ACT

- 144. Paragraphs 1 through 26 are realleged and incorporated herein by reference.
- 145. Pursuant to 30 TEX.ADMIN.CODE § 335.1 and 40 C.F.R. § 260.10, Formosa Texas is a generator of hazardous waste as identified or listed in 40 C.F.R. Part 261.

HAZARDOUS WASTE DETERMINATION VIOLATIONS

146. Pursuant to 30 TEX.ADMIN.CODE § 335.504, any person who generates a solid waste as defined in 40 C.F.R. § 261.2 must determine if that waste is a hazardous either by applying the required test method or by applying its knowledge of the hazardous characteristic of the waste in light of the materials or the processed used.

FIFTEENTH CLAIM FOR RELIEF

(Failure to Make Waste Determination for Paint Removal Media)

- 147. At the time of the EPA Inspection Formosa used glass beads and steel shot to remove paint from equipment at the Texas Facility.
- 148. Formosa personnel informed EPA inspectors that Formosa discards spent glass beads in the general trash and that spent steel shot was "put with the scrap metal."
- 149. When EPA inspectors requested documentation of hazardous waste determination for the spent glass beads and steel shot, Formosa did not provide any evidence that a hazardous waste determination had been made.
- 150. Therefore, Formosa Texas failed to make a hazardous waste determination from the glass beads and steel shot in violation of 30 TEX.ADMIN.CODE § 335.504.
- 151. Unless restrained by an Order of the Court, Formosa Texas will continue to violate 30 TEX.ADMIN.CODE § 335.504.

SIXTEENTH CLAIM FOR RELIEF

(Failure to Make Waste Determination for Tank C06B Wastewater)

- 152. EPA inspectors observed wastewater from Formosa's wastewater treatment plant ("WWTP"), specifically, Tank C06B, flowing to the ground.
- 153. The deposit of this wastewater onto the ground constitutes disposal of a solid waste. 30 TEX.ADMIN.CODE § 335.1(40) and (133)
- 154. At the time of the EPA inspection, Formosa Texas had not made a hazardous waste determination for the wastewater that exited the WWTP.

- 155. Therefore, Formosa Texas has violated 30 TEX.ADMIN.CODE § 335.504 by failing to make a hazardous waste determination for the wastewater from Tank C06B, which was deposited on the ground.
- 156. Unless restrained by an Order of the Court, Formosa Texas will continue to violate 30 TEX.ADMIN.CODE § 335.504.

SEVENTEENTH CLAIM FOR RELIEF

(Failure to Make Waste Determination for CPI Separator Water Used in Cooling Towers)

- 157. At the time of the EPA inspection, Formosa Texas occasionally was using wastewater from the CPI separator in the Olefins I production unit to feed the Formosa Texas cooling towers.
- 158. At the time of the EPA inspection, Formosa Texas had determined that the petroleum contaminated debris that is removed from the CPI separator in the Olefins I unit met the definition of a K170 listed hazardous waste.
- 159. At the time of the EPA Inspection, Formosa Texas had not made a hazardous waste determination for the wastewater from the CPI separator in the Olefins I production unit that was used to feed the Texas Facility cooling towers.
- 160. Therefore, Formosa Texas has violated 30 TEX.ADMIN.CODE § 335.504 by failing to make a hazardous waste determination for the wastewater from the CPI separator in the Olefins 1 production unit used to feed the Formosa Texas cooling towers.
- 161. Unless restrained by an Order of the Court, Formosa Texas will continue to violate 30 TEX.ADMIN.CODE § 335.504 [40 C.F.R. § 262.11].

EIGHTEENTH CLAIM FOR RELIEF

(Failure to Make Hazardous Waste Determination for WWTP Biological Treatment Sludge)

- 162. The Formosa Texas WWTP received contaminated groundwater carrying the following hazardous waste listings: U077, K019, and K020.
- 163. On April 5, 1996, the TNRCC granted Formosa Texas a delisting for the WWTP biological treatment sludge, with the condition that groundwater treated in the wastewater treatment system, and carrying the listings U077, K019, and K020 be pretreated to risk-based levels in the TNRCC Risk Reduction Rules and the universal treatment standards in 40 C.F.R., Part 268.
- Data provided to the EPA inspectors by Formosa Texas demonstrated that over a period of seven (7) days there were four (4) exceedances of the universal treatment standard for EDC in U077, K019, and K020 wastewaters.
- 165. Because Formosa Texas failed to meet the conditions for delisting of its WWTP biological treatment sludge, that sludge was listed hazardous waste carrying the listings U077, K019, and K020.
- 166. Formosa Texas did not make a hazardous waste determination for the WWTP biological treatment sludge, and did not manage the sludge as a listed hazardous waste.
- 167. Therefore, Formosa Texas failed to make a hazardous waste determination from the WWTP biological treatment sludge in violation of 30 TEX.ADMIN.CODE § 335.504.
- 168. Unless restrained by an Order of the Court, Formosa Texas will continue to violate 30 TEX.ADMIN.CODE § 335.504.

NINETEENTH CLAIM FOR RELIEF

(Failure to Mark Hazardous Waste Storage Containers)

- waste to accumulate as much as 55 gallons of hazardous waste in containers at or near the point of generation where waste initially accumulates, which is under the control of the operator of the process generating the waste without a permit or interim status and without complying with 40 C.F.R. § 262.34(a), provided the generator complies with 40 C.F.R. §§ 265.171, 265.172, 265.173(a), and marks his containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.
- 170. Pursuant to 30 TEX.ADMIN.CODE § 335.69(d)(2), a generator must, with respect to that amount of excess waste, comply within three days with 40 C.F.R. § 262.34 (a), 40 C.F.R. §§ 265.171, 265.172, 265.173(a), and mark those containers either with the words "Hazardous Waste" or with other words identifying the contents of the containers.
- 171. At the time of the EPA inspection, one container of hazardous waste at a satellite accumulation area in the Formosa Texas main laboratory was not marked with the words "Hazardous Waste," or other words identifying the contents of the container.
- 172. Therefore, Formosa Texas violated 30 TEX.ADMIN.CODE § 335.69(d)(2) by failing to mark a container with the words "Hazardous Waste," or other words identifying the contents of the container.

TWENTIETH CLAIM FOR RELIEF

(Failure to Hazardous Waste Containers with Accumulation Start Date)

173. Pursuant to 30 TEX.ADMIN.CODE § 335.69(e), a generator must, with respect to that amount of excess waste, during the three day period, mark the container holding

the excess accumulation of hazardous waste with the date the excess amount began accumulating.

- 174. At the time of the EPA inspection, three (3) drums were being stored at the satellite accumulation area in the EDC plant, containing a total of more than 55 gallons of hazardous waste. None of the drums was marked with an accumulation start date.
- 175. Pursuant to 30 TEX.ADMIN.CODE § 335.69(a)(2), a generator may accumulate in containers hazardous waste on-site for 90 days or less without a permit or without having interim status, provided that the generator complies with the applicable requirements of 40 C.F.R. Part 265, subpart I, AA, BB, and CC; and the generator marks and make visible for inspection the beginning date of accumulation on each container.
- 176. At the time of the EPA inspection, the accumulation start date was not marked on three 55-gallon drums of hazardous waste from the Formosa Texas main laboratory. The drums were accumulated in an outside shed, which Formosa had designated as a satellite accumulation point.
- 177. The wastes contained in those three 55-gallon drums had initially been accumulated in small containers located in the hoods in the separate labs inside the Formosa Texas building.
- 178. Therefore, the outside shed must be classified as a "less-than-90-day" accumulation point.
- 179. Accordingly, Formosa Texas must mark each of the drums in the outside shed with the beginning date of waste accumulation in such drum.

180. Therefore, Formosa Texas violated 30 TEX.ADMIN.CODE § 335.69(a)(2) by failing to mark each of the drums in the outside shed with the beginning date of waste accumulation in such drum.

TWENTY-FIRST CLAIM FOR RELIEF

(Failure to Close Hazardous Waste Storage Containers)

- 181. Pursuant to 30 TEX.ADMIN.CODE 335.69(d)(1), a container holding waste must always be closed during storage, except when it is necessary to add or remove waste.
- 182. At the time of the EPA inspection, four (4) containers of hazardous waste at satellite accumulation areas in the Formosa Texas main laboratory were not closed during accumulation.
- 183. Therefore Formosa Texas violated 30 TEX.ADMIN.CODE 335.69(d)(1) by failing to close containers of hazardous waste.

CLEAN WATER ACT

- 184. Paragraphs 1 through 14 and 55 through 65 are realleged and incorporated herein by reference.
- 185. At all relevant times Formosa Texas discharged wastewater from its permitted outfalls, Outfalls 001 and Outfall 003, into Lavaca Bay.

TWENTY-SECOND CLAIM FOR RELIEF

(Violations of Effluent Limitations)

186. Formosa Texas's Discharge Monitoring Reports ("DMRs"), filed during the period of March 2001 through September 2007, reported effluent limitation violations for Outfall 001, set forth in TPDES Permit No. 02436, on at least 22 separate occasions.

- 187. Therefore, Formosa Texas violated TPDES Permit No. 02436 by exceeding the effluent limitations contained in that permit.
- 188. Unless restrained by an order of the Court, Formosa Texas will continue to violate its TPDES Permit and the CWA.

TWENTY-THIRD CLAIM FOR RELIEF

(Failure to Sample Stormwater for Required Parameters)

189. On one or more occasions Formosa Texas violated its TPDES Permit No. 02436 by failing to sample its storm water discharge for all the required parameters, specifically, Formosa Texas failed to collect the required four (4) sample aliquots for the composite sample for volatile parameters at Outfall 001 on April 12, 2001, and failed to sample and analyze for 1,2-dichloroethane and total purgeable hydrocarbons at Outfall 003 during a stormwater discharge on November 17, 2001.

TWENTY-FOURTH CLAIM FOR RELIEF

(Failure to Properly Determine Depth of Water in Lavaca Bay)

- 190. Under TPDES Permit No. 02436, Formosa Texas discharged wastewater via Outfall 001 into Lavaca Bay through a diffuser located 8,400 feet from shore.
- 191. TPDES Permit No. 02436 requires Formosa Texas to cease wastewater discharges at times when the depth of Lavaca Bay at Channel Marker 22 (near the diffuser) is less than one (1) foot in depth.
- 192. TPDES Permit No. 02436 required Formosa Texas to install a staff gauge or alternative equipment "in the vicinity of Channel Marker 22" and read it daily to comply this the depth requirement.

- 193. At the time of the EPA Inspection, Formosa Texas was reading the bay depth near the shoreline at a dock and extrapolating the depth at Channel Marker 22 based on a supposedly known differential between the depth at the dock and the depth at Channel Marker 22. This alternative procedure was not contained in TPDES Permit No. 02436.
- 194. Therefore, Formosa Texas violated TPDES Permit No. 02436, Other Requirements Section, No. 13, by failing to locate its gauge or other equipment in the proper location.
- 195. Unless restrained by an order of the Court, Formosa Texas will continue to violate its TPDES Permit and the CWA.

Reporting Requirements (CERCLA/EPCRA)

- 196. Paragraphs 1 through 14 and 66 through 73 are realleged and incorporated herein by reference.
- 197. Pursuant to Section 313(a) of EPCRA, 42 U.S.C. § 11023(a), the owner or operator of a facility subject to the requirements of Section 313(a) of EPCRA, 42 U.S.C. § 11023(a) must complete a toxic chemical release form (Form R) as published under subsection (g) of Section 313 for each toxic chemical listed under subsection (c) of Section 313 that was manufactured, processed, or otherwise used in quantities exceeding the toxic chemical threshold quantity established by subsection (f) of Section 313 during the preceding calendar year at such facility.
- 198. Formosa Texas is the owner and/or operator of a facility subject to the requirements of Section 313(a) of EPCRA, 42 U.S.C. § 11023(a).

199. Pursuant to 40 C.F.R. § 372.30(a), for each toxic chemical known by the owner or operator to be manufactured (including imported), processed, or otherwise used in excess of an applicable threshold quantity in § 372.25, § 372.27, or § 372.28 of 40 C.F.R. Part 372, subpart A, at its covered facility described in 40 C.F.R. § 372.22 for a calendar year, the owner or operator must submit to EPA and to the State in which the facility is located a completed EPA Form R (EPA Form 9350–1) and, for the dioxin and dioxin-like compounds category, EPA Form R Schedule 1 (EPA Form 9350–3) in accordance with the instructions referred to in 40 C.F.R. Part 372, subpart E.

TWENTY-FIFTH CLAIM FOR RELIEF

(Failure to Report Activities Involving Toxic Chemicals)

- 200. Pursuant to 40 C.F.R. § 372.30(d), each Form R report for activities involving a toxic chemical that occurred during a calendar year at a covered facility must be submitted on or before July 1 of the next year.
- 201. Formosa Texas violated 40 C.F.R. § 372.30(d) by failing to report activities involving the following toxic chemicals in the years indicated: chloromethane (2001); chromium compounds (2002); 1,4 dioxane (2001); 1, 4 dioxane (2002); zinc compounds (2002).

TWENTY-SIXTH CLAIM FOR RELIEF

(Incorrectly Reporting Activities Involving Toxic Chemicals in Form R Reports)

202. Pursuant to 40 C.F.R. § 372.85(b)(2), each Form R must include the signature of a senior management official certifying the following: "I hereby certify that I have reviewed the attached documents and, to the best of my knowledge and belief, the submitted information is true and complete and that amounts and values in this report are accurate based upon reasonable estimates using data available to the preparer of the report."

- 203. Formosa Texas violated 40 C.F.R. § 372.85(b)(2) by submitting incorrect Form R reports for activities involving the following toxic chemicals in the years indicated: 1, 3 butadiene (2005); benzene (2005); ethylene (2002, 2005); methanol (2003, 2005); naphthalene (2005); N-hexane (2002); propylene (2002, 2005); styrene (2005); toluene (2005); vinyl chloride (2003).
- 204. Formosa Texas's failure to submit correct Form R reports for the toxic chemicals listed in the above paragraph was demonstrated by Formosa Texas's subsequent submission to EPA of revised Form R reports for those chemicals.
- 205. Formosa Texas violated 40 C.F.R. § 372.85(b)(2) by submitting incorrect Form R reports, specifically, Formosa Texas calculated incorrectly Section 8.1b of the Form R reports, for activities involving the following toxic chemicals in the years indicated: chromium (2002); 1,1,2 trichloroethane (2004); benzene (2004); dichlorodifluoromethane (2004); ethylene glycol (2004); xylene (2004).
- 206. Formosa Texas violated 40 C.F.R. § 372.85(b)(2) by submitting incorrect Form R reports, specifically, Formosa Texas failed to include the appropriate energy recovery code in Section 7B of its Form R reports, for activities involving the following toxic chemicals in the years indicated: 1,2 dichloroethane (2002); benzene (2002); chloroform (2002).
- 207. Formosa Texas violated 40 C.F.R. § 372.85(b)(2) by submitting incorrect Form R reports, specifically, Formosa Texas under-reported amounts for activities involving the following toxic chemicals in the years indicated: 1,3 butadiene (2001); 1,2 dichloroethane (2001); ethylene (2001); propylene (2001); vinyl chloride (2001); 1,1,2 trichloroethane (2002); benzene (2002); chlorobenzene (2002); dichlorodifluoromethane (2002); dichloromethane;

ethylene glycol (2002); H-hexane (2002); naphthalene (2002); propylene oxide (2002); styrene (2002); tetrachloroethylene (2002); toluene (2002).

208. Formosa Texas violated 40 C.F.R. § 372.85(b)(2) by submitting incorrect Form R reports, specifically, Formosa Texas failed to include the quantity reported in Section 8.8 of the Form R reports in Section 5 or 6 of those reports, for activities involving the following toxic chemicals in the years: 1,2 dichloroethane (2001); 1,3 butadiene (2001); benzene (2001); ethylene (2001); ethylene oxide (2001); N-hexane (2001); propylene (2001).

Formosa Louisiana

CLEAN AIR ACT

209. Paragraphs 1 through 14 and 27 through 54 are realleged and incorporated herein by reference.

LEAK DETECTION AND REPAIR VIOLATIONS

- 210. Formosa operated under a Fugitive Emissions Consolidation Program for the VCM I, VCM II, and the PVC plants, Permit No. 0840-00002-09 (the Source Notice and Agreement). The Source Notice and Agreement was signed on the February 28, 1997, and remained in effect until the initial Part 70 permit was issued on August 11, 2008.
- 211. Formosa Louisiana operates under a state preconstruction and Part 70 Operating Permit, Permit No.1004-V0 (the PVC Permit) for the PVC Unit. The Permit was issued on the 24th of October 2001, and expired on the 24th of October 2006. Formosa Louisiana submitted a timely renewal application for Permit No.1004-V0 on April 20, 2006. Permit No. 1004-V0 remains in effect pending the outcome of Formosa Louisiana's renewal request.

- 212. Pursuant to the Source Notice and Agreement, Formosa Louisiana was required to comply with 40 C.F.R. Part 63, subpart H- National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks for the VCM I and VCM II units.
- 213. Pursuant to the PVC Permit, Formosa Louisiana is required to comply with 40 C.F.R. Part 60, subpart VV Standards of Performance for Equipment Leaks in the Synthetic Organic Chemicals Manufacturing Industry for the PVC unit.
- 214. 40 C.F.R. § 63.180(b)(1) requires monitoring under Part 63, subpart H to comply with Method 21 of 40 C.F.R. Part 60, Appendix A.
- 215. 40 C.F.R. § 60.482-7(a) requires monitoring under Part 60, subpart VV to comply with Method 21 40 C.F.R. Part 60, Appendix A.

TWENTY-EIGHTH CLAIM FOR RELIEF

(Failure to Monitor in Accordance with EPA Method 21)

- 216. LDAR standards in 40 C.F.R. § 60.482-7(a) apply to equipment in the Formosa Louisiana PVC unit. LDAR standards in 40 C.F.R. § 63.168(b)(1) apply to equipment in the Formosa Louisiana VCM I and VCM II units.
- 217. Pursuant to 40 C.F.R. § 60.482-7(a) and 40 C.F.R. § 63.168(b)(1), all equipment subject to 40 C.F.R. Part 60, Subpart VV and 40 C.F.R. Part 63, Subpart H must be monitored in accordance with Method 21 of 40 C.F.R. Part 60, Appendix A.
- 218. Based on monitoring and observations conducted by EPA inspectors at the time of the EPA Inspection, Formosa Louisiana has failed to comply with Method 21 in at least in the PVC, VCM I, and VCM II units.

- 219. Therefore, Formosa Louisiana has violated 40 C.F.R. §§ 60.482-7(a) and 63.168(b)(1) by failing to monitor all equipment subject to 40 C.F.R. Part 60, Subpart VV and 40 C.F.R. Part 63, Subpart H in accordance with Method 21 of 40 C.F.R. Part 60, Appendix A.
- 220. Unless restrained by order of this Court, Formosa Louisiana will continue to violate 40 C.F.R. §§ 60.482-7(a) and 63.168(b)(1) and the CAA.

TWENTY-NINTH CLAIM FOR RELIEF

(Failure to Close Open-ended Valves)

- 221. LDAR standards in 40 C.F.R. § 63.167 apply to the Formosa Louisiana Facility.
- 222. Pursuant to 40 C.F.R. § 40 C.F.R. § 63.167(a)(1), each open-ended valve or line shall be equipped with a valve, plug, cap, or other device, subject to certain exceptions.
- During the Inspection, the inspectors identified five (5) open-ended valves in the VCM II unit. The valve numbers are 25912, 12840, 12849, 12858, and 12175.
- 224. After reviewing the inspection report and photographs prepared by the inspectors, EPA's enforcement staff identified seven (7) open-ended valves were identified in the VCM II unit. The valve numbers are 12174, 12171, 12172, 12173, 12074, 12077, and 099169.
- 225. After reviewing the inspection report and photographs prepared by the inspectors, EPA's enforcement staff identified two (2) open-ended valves were identified in the VCM I unit. The valve numbers are 23456 and 376595.
- 226. Ten (10) of the above-listed valves were leaking at the time of the EPA inspection at the following rates: 25912 (300 ppm), 12840 (1,000 ppm), 12849 (600 ppm), 12858

- (600 ppm), 12174 (1000 ppm), 12171 (900 ppm), 12074 (1000 ppm), 12077 (1000 ppm), 099169 (1700 ppm), and 376595 (200 ppm).
- 227. None of the identified open-ended valves were equipped with a cap, blind flange, plug, or second valve.
- 228. Formosa provided no documentation to EPA to demonstrate that the identified open-ended valves are exempt from regulations.
- 229. Formosa has therefore violated the Source Notice and Agreement and 40 C.F.R. § 63.167(a)(1) by not equipping each open-ended valve with a cap, blind flange, plug or second valve.
- 230. Unless restrained by an order of this Court, Formosa Louisiana will continue to violate the Source Notice and Agreement and 40 C.F.R. § 40 C.F.R. § 63.167(a)(1).

THIRTIETH CLAIM FOR RELIEF (Failure to Identify Leaking Equipment)

- 231. LDAR standards in 40 C.F.R. § 63.162 apply to the Formosa Louisiana Facility.
- 232. Pursuant to 40 C.F.R. §§ 63.162(f)(1) and (f)(2), when a leaking valve is detected as specified in 40 C.F.R. § 63.168, the leaking equipment should be clearly identified and the identification must remain on the valve until it is monitored as specified in 40 C.F.R. §§ 63.168(f)(3) and 63.175(e)(7)(i)(D) and no leak has been detected during the follow-up monitoring or the identification can be removed after the owner has elected to comply with 40 C.F.R. § 63.174(c)(1)(I) and monitor the valves as specify in 40 C.F.R. § 63.174(c)(1)(I).

- 233. EPA identified three leaking valves that were not tagged or otherwise identified (12074, 12077, and 099169), as required by the regulations.
- 234. Formosa Louisiana, has therefore violated the Source Notice and Agreement and 40 C.F.R. §§ 63.162(f)(1) and (f)(2) by not identifying its leaking valves.
- 235. Unless restrained by an order of this Court, Formosa Louisiana will continue to violate the Source Notice and Agreement and 40 C.F.R. §§ 63.162(f)(1) and (f)(2).

RESOURCE CONSERVATION AND RECOVERY ACT

- 236. Paragraphs 1 through 26 are realleged and incorporated herein by reference.
- 237. Formosa Louisiana operates as a large quantity generator of hazardous waste with the EPA ID number LAD041224932.
- 238. Hazardous waste generated at this facility includes: spent catalysts from the oxychlorination reactors, EDC contaminated materials and carbon from the VCM unit, spent laboratory solvents, and miscellaneous spill clean up materials.
- 239. Pursuant to LAC 33:V.109 and 40 C.F.R. § 260.10, Formosa Louisiana is a generator of hazardous waste as identified or listed in 40 C.F.R. Part 261.

Hazardous Waste Determinations

240. Pursuant to LAC 33:V.1103 and 40 C.F.R. § 262.11, any person who generates a solid waste as defined in 40 C.F.R. § 261.2 must determine if that waste is a hazardous either by applying the required test method or by applying its knowledge of the hazardous characteristic of the waste in light of the materials or the processed used.

241. Pursuant to LAC 33:V.1111(A)(3) [40 C.F.R.§ 262.40(c)], a generator must keep records of any test results, waste analyses, or other determinations made in accordance with LAC 33:V.1111 [40 C.F.R. § 262.11], for at least three years from the date the waste was last sent to on-site or off-site treatment, storage, or disposal.

THIRTY-FIRST CLAIM FOR RELIEF

(Failure to Make Hazardous Waste Determination for Tar Still Residue)

- 242. Pursuant to LAC 33:V. 4901 [40 C.F.R. 261.32], heavy ends from the distillation of ethylene dichloride in the ethylene production and heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production are K019 and K020 listed hazardous wastes, respectively.
- 243. K019 and K020 listed hazardous wastes are generated in Formosa Louisiana's Tar Still unit.
- 244. Approximately every eight (8) months Formosa Louisiana cleans the Tar Still unit.
- 245. During the Tar Still cleanout process, Formosa Louisiana pumps the heavy ends from the bottom of the Tar Still to a holding tank.
- 246. Formosa Louisiana then adds liquid EDC to the Tar Still and uses the liquid EDC to rinse heavy ends residues from the Tar Still. The EDC rinsate and heavy ends residues are pumped into the Formosa Louisiana process wastewater system.
 - 247. Formosa Louisiana then purges the Tar Still with nitrogen.
- 248. Formosa Louisiana then opens the Tar Still and hydroblasts the interior to remove the residues remaining inside of the Tar Still.

- 249. Formosa runs the hydroblast water through a filter and sends the water to its WWTP for treatment.
- 250. Formosa places the solid materials generated during the hydroblast process in drums and ships those materials off-site for disposal as D019, D022, D028, D043, and F024 listed hazardous wastes.
- 251. In addition to any other waste listing code that may apply to those drummed solids, those drummed solids should be identified properly as K019 and K020 listed hazardous waste pursuant to LAC 33:V.109 (definition of "Hazardous Waste," sections 3.b. and 4.b.i.)
- 252. Because Formosa Louisiana did not identify those drummed solids as K019 and K020 hazardous waste, Formosa did not make a correct hazardous waste determination in violation of LAC 33:V.1103 [40 C.F.R. § 262.11].
- 253. Unless restrained by an order of the Court, Formosa Louisiana will continue to violate LAC 33:V.1103 [40 C.F.R. § 262.11].

THIRTY-SECOND CLAIM FOR RELIEF

(Failure to Make Hazardous Waste Determination for Wastewater Sludge)

- 254. Pursuant to the Mixture Rule and Derived-from Rule, the hydroblast water generated from the cleaning of the Formosa Louisiana Tar Still unit carries the K019 and K020 hazardous waste listing codes.
- 255. Formosa Louisiana routes this hydroblast water through an open sewer to its WWTP for treatment.
- 256. Because the wastewater sent to the WWTP is a listed hazardous waste (K019 and K020), the wastewater treatment sludge generated in the WWTP also is K019 and

K020 listed hazardous waste pursuant to LAC 33:V.109 (definition of "Hazardous Waste," sections 3.b. and 4.b.i.).

- 257. Prior to, and at the time of, the EPA Inspection, Formosa Louisiana identified its WWTP sludge as K174 conditionally-exempt hazardous waste. Formosa Louisiana did not identify the WWTP sludge as K019 or K020 hazardous waste.
- 258. Therefore, Formosa Louisiana has failed to make an accurate hazardous waste determination for its WWTP wastewater treatment sludge in violation of LAC 33:V.1103 [40 C.F.R. § 262.11].
- 259. Unless restrained by an order of the Court, Formosa Louisiana will continue to violate LAC 33:V.1103 [40 C.F.R. § 262.11].

THIRTY-THIRD CLAIM FOR RELIEF

(Offering Hazardous Waste to Transporter or Treatment, Storage, or Disposal Facility without EPA Identification Number)

- 260. Pursuant to LAC 33:V.1105 [C.F.R. § 262.12(c)], a generator is prohibited from offering his hazardous waste to a transporter or a treatment, storage, or disposal facility that has not received an EPA identification number.
- 261. Formosa Louisiana offered K019 and K020 listed hazardous waste (wastewater sludge from its WWTP) to Woodside Landfill for disposal as non-hazardous waste.
- 262. Woodside Landfill does not have an EPA identification number and does not have a RCRA Subtitle C permit.
- 263. Formosa Louisiana violated LAC 33:V.1105 [40 C.F.R. § 262.12(c)] by offering hazardous waste to transporters or to a treatment, storage, or disposal facility that does not have an EPA identification number.

264. Unless restrained by an order of the Court, Formosa Louisiana will continue to violate LAC 33:V.1105 [40 C.F.R. § 262.12(c)].

CLEAN WATER ACT

265. Paragraphs 1 through 14 and 55 through 65 are realleged and incorporated herein by reference.

THIRTY-FOURTH CLAIM FOR RELIEF (Violations of LPDES Permit No. LA0006149)

- 266. At all relevant times Formosa Louisiana discharged wastewater from its permitted outfall, Outfall 001, into the Mississippi River.
- 267. Based on review of the Formosa Louisiana's DMRs, filed during the period of March 1, 2001 through September 2007, Formosa Louisiana exceeded its effluent limitations set forth in LPDES Permit No. LA0006149 on at least five (5) separate occasions.
- 268. Therefore, Formosa Louisiana violated LPDES Permit No. LA0006149 and the CWA by exceeding the effluent limitations contained in that permit.
- 269. Unless restrained by an order of the Court, Formosa Louisiana will continue to violate its LPDES Permit and the CWA.

PENALTIES

- 270. As provided in Section 113(b) of the CAA, 42 U.S.C. § 7413(b), the violations set forth above subject Defendants to injunctive relief and civil penalties up to \$27,500 per day for each violation of the CAA between January 30, 1997 and March 15, 2004; and \$32,500 per day for each violation occurring after March 15, 2004.
- 271. As provided in Section 3008(g) of RCRA, 42 U.S.C. § 6928(g), the violations set forth above subject Defendants to injunctive relief and civil penalties of up to

\$27,500 per day for each violation occurring before March 16, 2004 and \$32,500 per day for each violation occurring after March 16, 2004.

- 272. As provided in Sections 309(b) and (d) of the CWA, 33 U.S.C. §§ 1319(b) and (d), the violations set forth above subject Defendants to injunctive relief and civil penalties of up to \$27,500 per day for each violation of the CWA occurring before March 16, 2004 and up to \$32,500 per day for each violation of the CWA occurring on or after March 16, 2004.
- 273. As provided in Section 325(c)(1) of EPCRA, 42 U.S.C. § 11045(c)(1), the violations set forth above subject Defendants to injunctive relief and civil penalties of up to \$27,500 per day for each violation of the EPCRA occurring after January 30, 1997 and before March 16, 2004 and up to \$32,500 per day for each violation of the CWA occurring on or after March 16, 2004.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff, the United States of America, respectfully requests that this Court grant the following relief:

- A. Permanently enjoin Defendants from further violations of the Clean Air Act, 42 U.S.C. § 7401 et seq.; the Clean Water Act, 33 U.S.C. § 1251 et seq.; the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 et seq.; and the Emergency Planning and Community Right to Know Act, 42 U.S.C. § 11001 et seq. and their implementing permits and regulations.
- B. Order Defendants promptly to take all steps necessary or appropriate to comply with the foregoing laws, regulations and permits.

- C. A judgment assessing civil penalties against Defendants not to exceed \$27,500 per day for each violation that occurred prior to March 15, 2004 and not to exceed \$32,500 per day for each violation which occurred on or after March 16, 2004.
 - D. Award Plaintiff the costs and disbursements in this action.
 - E. Award such other relief as this Court may deem just and proper.

Respectfully submitted,

JOHN C. CRIJDEN

Agting Assistant Attorney General

Environment and

Natural Resources Division

U.S. Department of Justice

SCOTT M. CERNICH

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IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF TEXAS VICTORIA DIVISION

UNITED STATES OF AMERICA,)
Plaintiff,)
٧.) Civil Action No. 6:09-cv-00061
v.) CONSENT DECREE
Formosa Plastics Corporation, Texas,	j
Formosa Plastics Corporation, Louisiana,)
Formosa Hydrocarbons, Inc.,)
Defendants.)
	,

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XXI.	<u>APPENDICES</u>		37
XXII.	FINAL JUDGI	<u>MENT</u>	37

Plaintiff United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), has, concurrently with the lodging of this Consent Decree, filed a Complaint in this action alleging that: Defendant Formosa Plastics Corporation, Texas ("FPC TX") has violated the Clean Air Act ("CAA"), 42 U.S.C. § 7401 et seq.; the Clean Water Act ("CWA"), 33 U.S.C. § 1251 et seq.; the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6901 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9601 et seq.; and the Emergency Planning and Community Right-to-Know Act ("EPCRA"), 42 U.S.C. § 11001 et seq.; Defendant Formosa Plastics Corporation, Louisiana ("FPC LA") has violated the CAA, CWA, and RCRA; and Defendant Formosa Hydrocarbons, Inc. ("FHC") has violated the CAA.

EPA conducted a Multi-Media Compliance Inspection of the FPC TX and FHC facilities, located in Point Comfort, Texas, in November 2003 and February 2004, and conducted a Multi-Media Compliance Inspection of the FPC LA facility in April 2004.

The Complaint in this action alleges violations of: the New Source Performance Standards ("NSPS") and the National Emissions Standards for Hazardous Air Pollutants ("NESHAPs") promulgated under the CAA, as well as Defendants' respective CAA Title V permits; effluent limitations promulgated under the CWA; CWA National Pollutant Discharge Elimination System ("NPDES") permits; hazardous waste identification, treatment, storage, and disposal requirements promulgated under RCRA; and toxic release inventory reporting obligations under EPCRA and CERCLA.

Defendants do not admit any liability arising out of the transactions or occurrences alleged in the Complaint.

The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Defendants and the United States and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

- 1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345 and 1355; Section 113(b) of the CAA, 42 U.S.C. § 7413(b); Sections 301, 309 and 402 of the CWA, 33 U.S.C. §§ 1311, 1319 and 1342; Section 3008 of RCRA, 42 U.S.C. § 6928; Sections 304, 313 and 325 of EPCRA, 42 U.S.C. §§ 11004, 11023, and 11045; and Section 113 of CERCLA, 42 U.S.C. § 9613, and over the Parties. Venue lies in this District pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b); CWA Section 309(b), 33 U.S.C. § 1319(b); RCRA Section 3008(a), 42 U.S.C. 6928(a); EPCRA Section 325(b), 42 U.S.C. § 11045(b); and CERCLA Section 113(b), 42 U.S.C. § 9613(b), and 28 U.S.C. § 1391(b). For purposes of this Consent Decree, or any action to enforce this Consent Decree, Defendants consent to the personal jurisdiction of this Court and waive any objections to venue in this District.
- 2. For purposes of this Consent Decree, Defendants agree that the Complaint states claims upon which relief may be granted pursuant to Section 113(b) of the CAA, 42

U.S.C. § 7413(b); Sections 301, 309 and 402 of the CWA, 33 U.S.C. §§ 1311, 1319 and 1342; Section 3008 of RCRA, 42 U.S.C. § 6928; Sections 304, 313 and 325 of EPCRA, 42 U.S.C. §§ 11004, 11023, and 11045; and Section 113 of CERCLA, 42 U.S.C. § 9613.

II. APPLICABILITY

- 3. The obligations of this Consent Decree apply to and are binding upon the United States and upon Defendants and any successors, assigns, or other entities or persons otherwise bound by law.
- 4. No transfer of ownership or operation of a Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve a Defendant of its obligations to ensure that the terms of the Decree are implemented. At least 30 Days prior to such transfer, Defendant shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written transfer agreement, to EPA Region 6 and the United States Department of Justice, in accordance with Section XIII of this Decree (Notices). Any attempt to transfer ownership or operation of a Facility without complying with this Paragraph constitutes a violation of this Decree.
- 5. Defendants shall provide a copy of this Consent Decree (by hard copy, by electronic copy, or by providing online access to it with notice to the affected personnel) to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work required under

this Consent Decree. Defendant(s) shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

6. In any action to enforce this Consent Decree, Defendants shall not raise as a defense the failure by any of its co-Defendants, officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

III. <u>DEFINITIONS</u>

- 7. Terms used in this Consent Decree that are defined in the following Acts or in regulations promulgated pursuant to those Acts shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree: the Clean Air Act (CAA), 42 U.S.C. § 7401 et seq.; the Clean Water Act (CWA), 33 U.S.C. § 1251 et seq.; the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq.; and the Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. § 11001 et seq. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:
- a. "Complaint" shall mean the complaint filed by the United States in this action;
- b. "Consent Decree" or "Decree" shall mean this Decree and all appendices attached hereto (listed in Section XXII);
- c. "Day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day

would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day;

- d. "Date of Lodging" shall mean the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Southern District of Texas;
- e. "Defendant" or "Defendants" shall mean, as appropriate in the context of the specific provision of this Decree, Formosa Plastics Corporation, Texas ("FPC TX"), Formosa Hydrocarbons, Inc. ("FHC"), and/or Formosa Plastics Corporation, Louisiana ("FPC LA");
- f. "EPA" shall mean the United States Environmental Protection

 Agency and any of its successor departments or agencies;
 - g. "Effective Date" shall have the definition provided in Section XIV;
- h. "Existing," as used in the definition of "Facility" below, shall mean physically constructed or authorized by permit for construction as of the Date of Lodging of this Decree;
- i. "Facility" or "Facilities" shall mean the existing FPC TX facility located at 201 Formosa Drive, Point Comfort, Texas, the existing FHC facility located at 103 Fannin Road, Point Comfort, Texas, and the existing FPC LA facility located on Gulf States Road, Baton Rouge, Louisiana, as appropriate in the context of the specific provision of this Decree;
- j. "Paragraph" shall mean a portion of this Decree identified by an arabic numeral;

- k. "Parties" shall mean the United States and Defendants;
- l. "Section" shall mean a portion of this Decree identified by a roman numeral;
- m. "United States" shall mean the United States of America, acting on behalf of EPA.

IV. CIVIL PENALTY

- 8. Payments.
- a. First payment. Within 30 Days after the Effective Date of this Consent Decree, Defendants shall pay the sum of \$1,400,000 as a civil penalty, together with interest accruing from the Effective Date, at the rate specified in 28 U.S.C. § 1961 as of the Effective Date.
- b. Second Payment. Within 120 days after the Effective Date, Defendants shall pay the sum of \$1,400,000 as a civil penalty, together with interest accruing from the Effective Date, at the rate specified in 28 U.S.C. § 1961 as of the Effective Date.
- 9. Defendants shall pay the civil penalty due by FedWire Electronic Funds
 Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be
 provided to Defendants, following lodging of the Consent Decree, by the Financial Litigation
 Unit of the U.S. Attorney's Office for the Southern District of Texas, 919 Milam Street,
 Houston, Texas, 77208, (713) 567-9000. At the time of payment, Defendants shall send a copy
 of the EFT authorization form and the EFT transaction record, together with a transmittal letter,
 which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in
 United States v. Formosa Plastics Corporation, Texas, et al., and shall reference the civil action

number and DOJ case number 90-5-2-1-08995, to the United States in accordance with Section XIII of this Decree (Notices); by email to acctsreceivable.CINWD@epa.gov; and by mail to:

EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268

Defendants shall not deduct or capitalize any penalties paid under this

Decree pursuant to this Section or Section VII (Stipulated Penalties) in calculating their

respective federal, state, or local income taxes or in calculating any other tax.

V. <u>COMPLIANCE REQUIREMENTS</u>

- Leak Detection and Repair Defendants must undertake an enhanced Leak Detection and Repair program as set forth in Appendix A of this Consent Decree in order to minimize or eliminate fugitive emissions of volatile organic compounds ("VOCs"), benzene, volatile hazardous air pollutants ("VHAPs"), and organic hazardous air pollutants ("HAPs") from equipment in light liquid and/or in gas/vapor service.
- 12. Benzene Waste Operations NESHAP. Defendant FPC TX must undertake the measures set forth in Appendix B of this Consent Decree to ensure continuing compliance with 40 C.F.R. Part 61, Subpart FF (the Benzene Waste Operations NESHAP), and to minimize or eliminate fugitive benzene waste emissions at FPC TX.
- 13. Vinyl Chloride NESHAP. Defendants FPC TX and FPC LA must undertake the enhanced Vinyl Chloride NESHAP Leak Detection and Elimination Program set forth in Appendix C of this Consent Decree to ensure continuing compliance with 40 C.F.R. § 61.65(b)(8) and to minimize fugitive vinyl chloride monomer (VCM) emissions regulated under

Subpart F's Leak Detection and Elimination (LDE) Program in the VCM and PVC units at the FPC TX facility and the VCM and PVC units at the FPC LA facility.

- 14. Resource Conservation and Recovery Act. Defendants FPC TX and FPC LA must undertake the RCRA injunctive relief set forth in Appendix D of this Consent Decree to ensure compliance with RCRA.
- 15. Clean Water Act. Defendants must undertake the CWA injunctive relief set forth in Appendix E of this Consent Decree to ensure compliance with the CWA.
- 16. Emergency Planning and Community Right-to-Know. Defendant FPC TX must undertake the EPCRA injunctive relief set forth in Appendix F of this Consent Decree to ensure compliance with EPCRA and that FPC TX TRI reporting is accurate.
- 17. Approval of Deliverables. Unless otherwise specified in this Decree, after review of any plan, report, or other item that is required to be submitted pursuant to this Consent Decree, EPA shall, in writing: a) approve the submission; b) approve the submission upon specified conditions; c) approve part of the submission and disapprove the remainder; or d) disapprove the submission. EPA shall state in detail in writing all reasons for any disapproval.
- 18. If the submission is approved pursuant to Paragraph 17.a, Defendant shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 17.b or .c, Defendant shall, upon written direction from EPA, take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions, subject

to Defendant's right to dispute only the specified conditions or the disapproved portions, under Section IX of this Decree (Dispute Resolution).

- 19. If the submission is disapproved in whole or in part pursuant to Paragraph 17.c or .d, Defendant shall, within 45 Days of receipt of written disapproval from EPA or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, Defendant shall proceed in accordance with the preceding Paragraph.
- 20. Any stipulated penalties applicable to the original submission, as provided in Section VII of this Decree, shall accrue during the 45-Day period, or other agreed period, described in Paragraph 19 above, but shall not be payable unless the resubmission is untimely or is so deficient as to constitute a material breach of Defendant(s)' obligations under this Decree; provided that, if the original submission was so deficient as to constitute a material breach of Defendant(s)' obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.
- 21. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA may again require Defendant to correct any deficiencies, in accordance with the preceding Paragraphs, subject to Defendant's right to invoke Dispute Resolution and the right of EPA to seek stipulated penalties as provided in the preceding Paragraphs.
- 22. <u>Permits</u>. Where any compliance obligation under this Section requires a Defendant to obtain a federal, state, or local permit or approval, Defendant shall submit timely

and complete applications and take all other actions required of Defendant by the permitting authority under applicable laws and regulations to obtain all such permits or approvals.

Defendant(s) may seek relief under the provisions of Section VIII of this Consent Decree (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Defendant(s) has submitted timely and complete applications and has taken all other actions required by the permitting authority under applicable laws and regulations to obtain all such permits or approvals.

VI. REPORTING REQUIREMENTS

Report shall be due 31 days after the first full calendar half-year after the Effective Date of this Consent Decree (*i.e.*, either: (i) January 31 of the year after the Effective Date, if the Effective Date is between January 1 and June 30 of the preceding year; or (ii) July 31 of the year after the Effective Date, if the Effective Date is between July 1 and December 31). The initial Annual Report shall cover the period between the Date of Lodging and the first full half-year calendar date (*i.e.*, June 30 or December 31) after the Date of Lodging (a "half-year" runs between January 1 and June 30 and between July 1 and December 31). Until termination of this Decree, each subsequent report will be due on the same date in the following year and shall cover the prior two half-years (*i.e.*, either January 1 to December 31 or July 1 to June 30). The Annual Report shall include:

- a. all information required to be reported in the Annual Report under Appendices A through F of this Consent Decree (which may reference specific information previously submitted to EPA pursuant to this Consent Decree without re-submitting same);
- b, a description of any noncompliance with the requirements of this Consent Decree and an explanation of the likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such noncompliance. If Defendant(s) violate, or have reason to believe that they will more likely than not violate, any requirement of this Consent Decree, Defendant(s) shall notify the United States of such violation and its likely duration, in writing, within 10 working Days of the Day Defendant(s) first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Defendant(s) shall so state in the report. In the event the cause of a violation cannot be fully explained at the time the report is due, Defendant(s) shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day Defendant(s) becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves Defendant(s) of its obligation to provide the notice required by Section VIII of this Consent Decree (Force Majeure).
- 24. Whenever any violation of this Consent Decree or any other event affecting any Defendant's or Facility's performance under this Decree, or the performance of the Facilities, may pose an imminent and substantial endangerment to the public health or welfare, or the environment, the Defendant shall notify EPA Region 6 orally or by electronic or facsimile

transmission as soon as possible, but no later than 24 hours after Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

- 25. Defendant(s) also shall submit all other reports required in Appendices A through F in accordance with the schedules provided therein.
- 26. All reports shall be submitted to the persons designated in Section XIII (Notices) of this Consent Decree.
- 27. Each report submitted by Defendant(s) under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

28. The reporting requirements of this Consent Decree do not relieve

Defendant(s) of any additional reporting obligations required by the Acts or implementing
regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

29. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

VII. STIPULATED PENALTIES

- 30. Defendant(s) shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, ending with the date of correction, unless excused under Section VIII (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.
- 31. Late Payment of Civil Penalty. If Defendants fails to pay the civil penalty required to be paid under Section IV of this Decree (Civil Penalty) when due, Defendants shall pay a stipulated penalty of \$5,000 per Day for each Day that the payment is late. Defendants are jointly and severally liable for the civil penalty required to be paid under Section IV (Civil Penalty).
- 32. Compliance Requirements. The following stipulated penalties shall accrue for each violation of the requirements identified in Section V (Compliance Requirements) of this Decree:

Noncompliance with Requirements of Enhanced Leak Detection and Repair Program (Appendix A):

Violation	Stipulated Penalty
For failure to have a written LDAR program	\$7,500 per month (or portion thereof) for the first
as required by Appendix A, Subsection B,	two months; \$15,000 per month (or portion
paragraph 3	thereof) for the third month and beyond

For failure to implement the internal leak definitions as required in Appendix A,	\$100 per component, but not greater than \$25,000 per month per Covered Process Unit
Subsection C, paragraph 4	
For failure to implement monitoring frequencies as required in Appendix A, Subsection D	\$100 per component, but not greater than \$25,000 per month per Covered Process Unit
For failure to make repairs as specified in Appendix A, Subsection E, paragraphs 8 and 9	\$250 per component, but not greater than \$10,000 per month per Covered Process Unit
For failure to comply with the "drill and tap" requirements in Appendix A, Subsection E, paragraph 10	\$5,000 per valve per incident
For failure to correct a leak found using the optical gas imaging equipment as specified in Appendix A, Subsection E, paragraphs 13 and 14	\$5,000 per missed event
For failure to comply with delay of repair requirements in Appendix A, Subsection F, paragraph 15	\$100 per missed component
For failure to provide a List of "Existing Valves" in VHAP Covered Process Units under Appendix A, Subsection G, paragraph 17 a.	\$5,000 per month per VHAP Covered Process Unit (or portion thereof)
For failure to conduct and timely submit the Valve Technology Survey under Appendix A, Subsection G, paragraph 20	\$5,000 per month (or portion thereof)
For failure to update the Valve Technology Survey in subsequent Compliance Status Reports pursuant to Appendix A, Subsection G, paragraph 20	\$5,000 per month (or portion thereof)
For failure to install new valves or connectors in accordance with Appendix A, Subsection G, paragraphs 17.b. and 18.b.	\$1,000 per valve (a determination by a Defendant regarding a "best performing connector" or the "commercial availability" of valve technology shall not be grounds for assessment of a stipulated penalty unless Defendant failed to conduct the required investigation to determine the "best performing connector" or "commercial unavailability")

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	\$1,000 per valve (a determination by a Defendar regarding a "best performing connector" or the "commercial availability" of valve technology shall not be grounds for assessment of a stipulate penalty unless Defendant failed to conduct the required investigation to determine the "best performing connector" or "commercial unavailability") \$2,000 per valve (a determination by a Defendar regarding the "commercial availability" of valve technology shall not be grounds for assessment of a stipulated penalty unless Defendant failed to conduct the required investigation to determine the "commercial unavailability") \$5,000 per missing record \$5,000 per missing record Period of Delay

For failure to comply with any schedule for	Period of Delay	Penalty per
Corrective Action submitted pursuant to	day	
Appendix A, Subsection L, paragraph 33	1st through 30th day after deadline	\$1,250
	31st through 60th day after deadline	\$3,000
	Beyond 60th day	\$5,000
For failure to timely add new Covered	If it is determined through a federal	, state, or local
Equipment to the LDAR Program pursuant	investigation that Defendant has fai	
to Appendix A	Covered Equipment to its LDAR pr	ogram
	pursuant to applicable federal, state	, or local
	regulatory timelines, Defendant sha	ll pay \$2,000
	per component not timely added. If	Defendant
	determines (either on its own or thro	ough a third-
	party audit) that it has failed to add	new Covered
	Equipment to its LDAR program pu	irsuant to
	applicable federal, state, or local reg	gulatory
	guidelines, Defendant shall pay \$17	5 per
	component that it failed to timely ac	ld.
For failure to add existing Covered	If it is determined through a federal	
Equipment to the LDAR Program pursuant	investigation that Defendant has, by	
to Appendix A	one year after the Date of Lodging,	
	include any Existing Covered Equip	
	LDAR program, Defendant shall pa	
•	piece of Covered Equipment not inc	1
	Defendant determines (either on its	1
	through a third-party audit) that it h	
	than one year after the Date of Lodg	
	include any Existing Covered Equip	
	LDAR program, Defendant shall pa	
	piece of Covered Equipment that it	failed to
	include.	

Noncompliance with Benzene Waste Operations NESHAP Injunctive Relief (Appendix B):

Violation	Stipulated Penalty
For failure to conduct review and	\$7,500 per month (or any portion thereof) for the
verification of TAB as required in	first two months; \$15,000 per month (or portion
Appendix B, paragraph 3	thereof) for the third month and beyond
For failure to take actions necessary to correct non-compliance or come into compliance as required by Appendix B, paragraph 4	For each violation: \$750 per day for the first 30 days of noncompliance, \$1,500 per day from 31 st to 60 th day of noncompliance and \$3,500 per day thereafter
For failure to review a benzene spill as required by Appendix B, paragraph 8	For each event review failure: \$500

For failure to install primary and secondary carbon canisters as required by Appendix B, paragraph 5.a	For each violation, \$250 per day for the first 30 days of noncompliance, \$750 per day from the 31 st to 60th day of noncompliance and \$1,000 per day thereafter
For failure to conduct sampling as required by Appendix B, paragraph 10.a	For each violation, \$250 per day for the first 30 days of noncompliance, \$750 per day from the 31 st to 60th day of noncompliance and \$1,000 per day thereafter
For failure to take corrective action as required by Appendix B, paragraph 11	For each corrective action required: \$7,500 per month (or portion thereof) for the first two months; \$15,000 per month (or portion thereof) for the third month and beyond
For failure to comply with the miscellaneous inspection and monitoring requirements of Appendix B, paragraph 12	For each violation, \$200 per day for the first 30 days of noncompliance, \$350 per day from the 31 st to 60 th day of noncompliance, and \$750 per day thereafter
For failure to establish an annual review program to identify new benzene waste streams as required by Appendix B, Paragraph 6	\$2,500 per month
For failure to perform laboratory audits as required by Appendix B, Paragraph 7	\$5,000 per month, per audit.
For failure to implement the training requirements as set forth in Appendix B, Paragraph 9	\$10,000 per quarter

Noncompliance with VC NESHAP Leak Detection and Elimination Program Injunctive Relief (Appendix C):

Renei (Appendix C):	
Violation	Stipulated Penalty
For failure to submit current LDE plans to	\$1,000 per month (or portion thereof)
EPA pursuant to Appendix C, paragraph 2	
For failure to set ambient air monitoring systems to alarm at 5 ppm VCM on a one-monitoring cycle basis pursuant to Appendix	\$5,000 per month (or portion thereof)
C, paragraph 3	
For failure to conduct a field walk-through to determine whether a leak is present when the system goes into alarm at 5 ppm VCM or greater pursuant to Appendix C, paragraph 3	\$1,000 per event
For failure to perform Audit in Appendix C, paragraph 7	\$5,000 per month (or portion thereof)
For failure to perform quarterly Trend Analysis in Appendix C, paragraph 4	\$1,000 per quarter (or portion thereof)

Violation	Stipulated Penalty
For failure to conduct recordkeeping pursuant to Appendix C, paragraph 10	For each violation, \$250 per day for the first 30 days of noncompliance, \$1000 per day from the 31 st to 60 th day of noncompliance, and \$2000 per day thereafter
For failure to include specified information in quarterly reports pursuant to Appendix C, paragraph 11	\$1,000 per quarter

Noncompliance with Resource Conservation and Recovery Act Injunctive Relief (Appendix D):

Violation	Stipulated Penalty
For failure to cease discharging EDC rinse	\$10,000 per day
used to clean the Tar Still to Tank NT-502 or	
any part of the FPC LA wastewater system	
pursuant to Appendix D, paragraph A.1.	
For failure to include the hazardous waste	\$2,500 per day for the 1 st through the 14 th day
codes of K019 and K020 on manifests for all	of noncompliance; \$3,000 per day for the 15th
waste materials removed from the Tar Still,	through the 31 st day of noncompliance; and
and failure to send such waste materials off-	\$4,000 per day thereafter
site for disposal pursuant to Appendix D,	
paragraph A.2	at the
For failure to make a waste determination for	\$2,500 per day for the 1 st through the 14 th day
the water discharged from the wastewater CPI	of noncompliance; \$3,000 per day for the 15 th
into the process cooling towers pursuant to	through the 31st day of noncompliance; and
Appendix D, paragraph B.1.	\$4,000 per day thereafter
For failure to manage all wastewater sludge	\$2,500 per day for the 1st through the 14th day
generated at and downstream from Unit TZT-	of noncompliance; \$3,000 per day for the 15 th
07 under the hazardous waste codes U077,	through the 31 st day of noncompliance; and
K019, and K020 pursuant to Appendix D,	\$4,000 per day thereafter
paragraph B.2	

Noncompliance with CWA Injunctive Relief (Appendix E):

Violation	Stipulated Penalty
For failure to perform the root cause	Per each violation: \$1,000
investigations, or to take an necessary	
corrective actions, pursuant to Appendix E,	
paragraph 1	

Noncompliance with CERCLA/EPCRA Injunctive Relief (Appendix F):

Trouble from Charles Call Infance V Robert (Tropolation)		
I	Violation	Stipulated Penalty
	, 101611011	i Dispusition a datasty

Violation	Stipulated Penalty
For failure to timely complete the	For each violation, \$500 per day for the first 30
comprehensive internal review, or timely	days of noncompliance, \$1,000 per day from
correct deficiencies identified during that	the 31st to 60th day of noncompliance, and
review pursuant to Appendix F, paragraph 1	\$2,000 per day thereafter
For failure to correct and submit TRI reports	For each violation, \$250 per day for the first 30
under Appendix F, paragraph 2.a	days of noncompliance, \$1,000 per day from
	the 31 st to 60 th day of noncompliance, and
	\$2,000 per day thereafter
For failure to institute internal chemical review	For each violation, \$500 per day for the first 30
program required by Appendix F, paragraph 3	days of noncompliance, \$1,000 per day from
	the 31st to 60th day of noncompliance, and
	\$2,000 per day thereafter

33. Reporting Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the reporting requirements of Section VI (Reporting Requirements) of this Consent Decree:

Penalty Per Violation Per Day	Period of Noncompliance
\$1,000	1st through 14th Day
\$2,000	15th through 30th Day
\$3,500	31st Day and beyond

- 34. Except as provided in paragraph 30 above, stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of the Consent Decree.
- 35. Defendant shall pay any stipulated penalty within 30 Days of receiving the United States' written demand, subject to the Dispute Resolution provisions of Section IX.

- 36. The United States may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.
- 37. Stipulated penalties shall continue to accrue as provided in Paragraph 34, during any Dispute Resolution, but need not be paid until the following:
- a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 Days of the effective date of the agreement or the receipt of EPA's decision or order.
- b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Defendant(s) shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below.
- pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.
- Obligations Prior to the Effective Date. Upon the Effective Date of this Consent Decree, the stipulated penalty provisions of this Decree shall be retroactively enforceable with regard to any and all violations of Section V that occurred between the Date of Lodging and prior to the Effective Date of the Consent Decree, provided that stipulated penalties that may have accrued prior to the Effective Date may not be collected unless and until this Consent Decree is entered by the Court.

- 39. Defendant(s) shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 9, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.
- 40. If Defendant(s) fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant(s) shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for Defendant(s)' failure to pay any stipulated penalties.
- 41. Subject to the provisions of Section XI of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for Defendant(s)' violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Acts, or the Acts' implementing regulations, Defendant(s) shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

VIII. FORCE MAJEURE

42. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant, or of Defendant's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendant's best efforts to fulfill the obligation.

The requirement that Defendants exercise best efforts to fulfill the obligation includes using best

efforts to anticipate any potential force majeure event and best efforts to address the effects of any such event (a) as it is occurring; and (b) after it has occurred, to prevent or minimize any resulting delay to the greatest extent possible. "Force Majeure" does not include Defendant's financial inability to perform any obligation under this Consent Decree.

43. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Defendant shall provide notice orally or by electronic or facsimile transmission to EPA within 96 hours of when Defendant(s) first knew that the event might cause a delay. Within seven (7) days after Defendant's notice to EPA, Defendant(s) shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Defendant(s)' rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Defendant(s), such event may cause or contribute to an endangerment to public health, welfare or the environment. Defendant(s) shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Defendant(s) from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Defendant(s) shall be deemed to know of any circumstance of which Defendant(s), any entity controlled by Defendant(s), or Defendant(s) contractors knew or should have known.

- 44. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation; however, Defendant may request that the time be extended for performance of any other obligation that is affected by the force majeure event. EPA will notify Defendant in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.
- 45. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Defendant in writing of its decision.
- 46. If Defendant elects to invoke the dispute resolution procedures set forth in Section IX (Dispute Resolution), it shall do so no later than 15 Days after receipt of EPA's notice. In the event that EPA does not notify Defendant of its decision within 60 Days, Defendant may invoke the dispute resolution procedures set forth in Section IX (Dispute Resolution) as if EPA had denied Defendant's Force Majeure submittal. In any such proceeding, Defendant shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Defendant complied with the requirements of Paragraphs 42 and 43, above. If Defendant carries this burden, the

delay at issue shall be deemed not to be a violation by Defendant of the affected obligation of this Consent Decree identified to EPA and the Court.

IX. DISPUTE RESOLUTION

- 47. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Defendant's failure to seek resolution of a dispute under this Section shall preclude Defendant from raising any such issue as a defense to an action by the United States to enforce any obligation of Defendant arising under this Decree.
- 48. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Defendant sends the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 20 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 60 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.
- 49. Formal Dispute Resolution. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of

Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Defendant's position and any supporting documentation relied upon by Defendant.

- 50. The United States shall serve its Statement of Position within 45 Days of receipt of Defendant's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.
- 51. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XIII of this Consent Decree (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within 10 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Defendant's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.
- 52. The United States shall respond to Defendant's motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

53. Standard of Review

a. <u>Disputes Concerning Matters Accorded Record Review</u>. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 48 pertaining

to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law or this Consent Decree.

- b. Other Disputes. Except as otherwise provided in this Consent

 Decree, in any other dispute brought under Paragraph 48, Defendant shall bear the burden of

 demonstrating by a preponderance of the evidence that its position complies with this Consent

 Decree.
- 54. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendants under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in this Section. If Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VII (Stipulated Penalties).

X. INFORMATION COLLECTION AND RETENTION

55. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any Facility covered by this Consent Decree,

for any purpose in connection with this Consent Decree, at all reasonable times, upon presentation of credentials, to:

- a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Defendant(s) or its representatives, contractors, or consultants;
- d. obtain documentary evidence, including photographs and similar data; and
 - e. assess Defendant's compliance with this Consent Decree.
- 56. Upon request made prior to sampling, Defendant(s) shall provide EPA or its authorized representatives splits of any samples taken by Defendant(s). Upon request made prior to sampling, EPA shall provide Defendant(s) splits of any samples taken by EPA.
- Defendant shall: a) retain all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its possession or control, or that come into its possession or control, that directly relate to Defendant's performance of its obligations under this Consent Decree; and b) require its contractors and agents to preserve all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in the contractor's or agent's possession or control, that directly relate to Defendant's performance of its obligations

under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States, Defendants shall provide copies of any documents, records, or other information required to be retained under this Paragraph.

- 58. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendants shall notify the United States at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, Defendants shall deliver any such documents, records, or other information to EPA. Defendants may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If a Defendant asserts such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Defendant. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.
- 59. Defendants may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2.

 As to any information that Defendants seek to protect as CBI, Defendants shall follow the procedures set forth in 40 C.F.R. Part 2.

60. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendants to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XI. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

61. This Consent Decree resolves the civil claims of the United States through the Date of Lodging for: (a) the violations alleged in the Complaint filed in this action and (b)(i) all "Areas of Noncompliance" and "Areas of Concern" identified on Pages 10 through 25 of the EPA Inspection Report for the FPC TX and FHC facilities (NEICVP0614E01), dated April 2005; (ii) all "Areas of Concern" identified on Pages 11 through 12 of the EPA RCRA Compliance Inspection Report for the FPC LA facility (NEICVP0631E01), dated April 2005 (subject to the exceptions noted in this paragraph below); and (iii) all "Areas of Concern" identified on Pages 7 through 15 of the EPA Air Inspection Report for the FPC LA facility, dated October 20, 2004; HOWEVER, notwithstanding the foregoing, this Consent Decree does not resolve: any claims related to areas of concern, potential violations, or violations of 40 C.F.R. Part 82, subpart F governing the use of ozone depleting substances at any Defendant facility; AND, FURTHER, does not relieve Defendants of any existing or future corrective action obligations under any order or permit issued pursuant to RCRA, or any state hazardous waste program authorized pursuant to RCRA, whether arising before or after the Date of Lodging, at any Defendant Facility.

- enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 61. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal laws, regulations, or permit conditions, except as expressly specified in Paragraph 61. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendant(s)' Facilities, whether related to the violations addressed in this Consent Decree or otherwise.
- United States for injunctive relief, civil penalties, other appropriate relief relating to a Facility or Defendant(s)' violations, Defendant(s) shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 61 of this Section.
- 64. This Consent Decree is not a permit, or a modification of any permit under any federal, State, or local laws or regulations. Defendant(s) is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, permits, and orders; and Defendant(s)' compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth

herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant(s)' compliance with any aspect of this Consent Decree will result in compliance with provisions of the Clean Air Act (CAA), 42 U.S.C. § 7401 et seq.; the Clean Water Act (CWA), 33 U.S.C. § 1251 et seq.; the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq.; and the Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. § 11001 et seq., or with any other provisions of federal, state, or local laws, regulations, permits, or orders.

- 65. This Consent Decree does not limit or affect the rights of Defendant(s) or of the United States against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Defendant(s), except as otherwise provided by law.
- 66. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XII. COSTS

67. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendant(s).

XIII. NOTICES

68. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

To EPA only:

EPA Region 6

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

-and-

EPA Headquarters

Director, Special Litigation and Projects Division Office of Civil Enforcement Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW (MC 2248-A) Washington, DC 20460

To the United States -- to EPA as indicated above, and:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

To Defendant(s):

Formosa Plastics Corporation, Texas 201 Formosa Drive Point Comfort, TX 77978 Attn: Plant Manager

Formosa Plastics Corporation, Louisiana Gulf States Road Baton Rouge, LA 70805 -or-

P.O. Box 271 Baton Rouge, LA 70821 Telephone: (225) 356-3341

Formosa Hydrocarbons Company, Inc. P.O. Box 769
103 Fannin Road
Point Comfort, TX 77978
Telephone: (361) 987-8900

With a copy to:

Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400 FAX: (512) 495-6401

69. Telephonic or facsimile notifications to EPA shall be made as follows:

VIA TELEPHONE: 214-665-2190 -or- 214-665-2129

VIA FACSIMILE: 214-665-3177

- 70. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.
- 71. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XIV. EFFECTIVE DATE

72. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted,

whichever occurs first, as recorded on the Court's docket; provided, however, that Defendant(s) hereby agrees that it shall be bound to perform duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

XV. RETENTION OF JURISDICTION

73. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections IX and XVI, or effectuating or enforcing compliance with the terms of this Decree.

XVI. MODIFICATION

- 74. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.
- 75. Any disputes concerning modification of this Decree shall be resolved pursuant to Section IX of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 53, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XVII. TERMINATION

- 76. At any time five (5) years after the Effective Date of the Consent Decree,
 Defendants may serve upon the United States a Request for Termination, together with
 supporting documents, stating that: a) Defendants have completed the requirements of Section V
 (Compliance Requirements) of this Decree; b) have maintained satisfactory compliance with
 Section V of this Consent Decree for a period of five (5) years; c) have complied with all other
 requirements of this Consent Decree; and d) have paid the civil penalty and any accrued
 stipulated penalties as required by this Consent Decree.
- 77. Following receipt by the United States of Defendants' Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Defendants have satisfactorily complied with the requirements for termination of this Consent Decree. If the United States agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.
- 78. If the United States does not agree that the Decree may be terminated,
 Defendants may invoke Dispute Resolution under Section IX of this Decree. However,
 Defendants shall not seek Dispute Resolution of any dispute regarding termination, under
 Paragraph 48 of Section IX, until 75 Days after service of its Request for Termination.

XVIII. PUBLIC PARTICIPATION

79. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappro-

priate, improper, or inadequate. Defendants consent to entry of this Consent Decree without further notice and agree not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendants in writing that it no longer supports entry of the Decree.

XIX. SIGNATORIES/SERVICE

- 80. Each undersigned representative of Defendants and the Assistant Attorney
 General for the Environment and Natural Resources Division of the Department of Justice
 certifies that he or she is fully authorized to enter into the terms and conditions of this Consent
 Decree and to execute and legally bind the Party he or she represents to this document.
- 81. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. With respect to all matters arising under or relating to this Consent Decree, Defendants agree to accept service of process by certified mail, return receipt requested, to the addresses set forth in Section XIII (Notices) and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XX. INTEGRATION

82. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and approved pursuant to this Decree, no other document, nor any representation,

inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

XXI. APPENDICES

83. The following appendices are attached to and part of this Consent Decree: Appendices A, B, C, D, E, and F.

XXII. FINAL JUDGMENT

84. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States and Defendant(s). The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Federal Rules of Civil Procedure 54 and 58.

Dated and entered this 3 day of Ebruary, 2010.

UNITED STATES DISTRICT JUDGE

Southern District of Texas

Signature Page to Consent Decree in U.S. v. Formosa Plastics Corporation, Texas, et al.

Through their undersigned representatives, the Parties agree and consent to the entry of this Consent Decree subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

Date:

Date:

FOR PLAINTIFF, UNITED STATES OF AMERICA:

INFORMITIEN

Acting Assistant Attorney General
Environment and Natural Resources Division

United States Department of Justice

SCOTT M. CERNICH

Trial Attorney

Environmental Enforcement Section

Environment and Natural Resources Division

United States Department of Justice

P.O. Box 7611

Washington, DC 20044-7611

(202) 514-0056

(202) 514-8395

TIM JOHNSON

United States Attorney

Southern District of Texas

DANIEL HU

Assistant United States Attorney

Southern District of Texas

Bar Nos.: Texas: 10131415

S.D. Tex.: 7959

P.O. Box 61129

919 Milam Street

Houston, TX 77208

Signature Page to Consent Decree in U.S. v. Formosa Plastics Corporation, Texas, et al.

Through their undersigned representatives, the Parties agree and consent to the entry of this Consent Decree subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

Date:

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

CYNTHIA GILES

Assistant Administrator

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

ADMM M. KUSHNER

Director

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

Date: 9/23/09

Date: 9/21/09

BERNADETTE M. RAPPOLD

Director, Special Litigation and Projects Division

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

1200 Pennsylvania Avenue, NW (MC 2248-A)

Washington, DC 20460

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Washington, DC 20460

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Signature Page to Consent Decree in U.S. v. Formosa Plastics Corporation, Texas, et al.

Through their undersigned representatives, the Parties agree and consent to the entry of this Consent Decree subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY, RIGION 6:

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Date: 4/25/09

Dute: 9/24/09

Signature Page to Consent Decree in U.S. v. Formosa Plastics Corporation, Texas, et al.

Through their undersigned representatives, the Parties agree and consent to the entry of this Consent Decree subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

FOR DEFENDANTS, FORMOSA PLASTICS CORPORATION, TEXAS AND FORMOSA HYDROCARBONS COMPANY, INC.:

Randall P. Smith

Date: 9/17/09

Vice President/ General Manager Formosa Plastics Corporation, Texas

FOR DEFENDANT, FORMOSA PLASTICS CORPORATION, LOUISIANA:

Jay Su

Date:

te: 8-17-09.

Vice President

Vinyl Division

Formosa Plastics Corporation, U.S.A.

APPENDIX A-ENHANCED LDAR PROGRAM

DEFINITIONS

The following definitions shall be used in Appendix A:

"Certified Low-Leaking Valves" shall mean valves for which a manufacturer has issued either: (i) a written guarantee that the valve technology will not leak above 100 ppm for five years; or (ii) a written guarantee, certification or equivalent documentation that the valve technology has been tested pursuant to generally-accepted good engineering practices and has been found to be leaking at no greater than 100 ppm.

"Certified Low-Leaking Valve Packing Technology" shall mean valve packing technology for which a manufacturer has issued either: (i) a written guarantee that the valve packing technology will not leak above 100 ppm for five years; or (ii) a written guarantee, certification or equivalent documentation that the valve packing technology has been tested pursuant to generally-accepted good engineering practices and has been found to be leaking at no greater than 100 ppm.

"Covered Equipment" shall mean all Covered Types of Equipment in all Covered Process Units.

"Covered Facilities" shall mean the following facilities:

- 1. FPC TX facility at 201 Formosa Drive, Point Comfort, Texas;
- 2. FHC facility at 103 Fannin Road, Point Comfort, Texas; and,
- 3. FPC LA facility at Gulf States Road, Baton Rouge, Louisiana.

"Covered Process Unit or Units" shall include the following manufacturing areas of the "Covered Facilities":

At Formosa Plastics Corporation, Texas ("FPC TX"), the term includes the:

- 1. Ethylene dichloride unit ("EDC");
- 2. Ethylene glycol unit ("EG");
- 3. Formosa hydrocarbons unit ("FHC");
- 4. High density polyethylene units ("HDPEI/HDPEII");
- 5. Liner low density polyethylene unit ("LLDPE");
- 6. Polypropylene units ("PPI/PPII");
- 7. Marine and inland traffic units ("Traffic");
- 8. Olefins units, including the gasoline hydrotreater unit and propylene purification unit ("OLI/ OLII");
- 9. Vinyl chloride monomer unit ("VCM"); and,
- 10. Suspension polyvinyl chloride unit ("PVC").

At Formosa Plastics Corporation, Louisiana ("FPC LA"), the term includes the:

- 1. Vinyl chloride monomer unit ("VCM"); and,
- 2. Suspension polyvinyl chloride unit ("PVC").

"Covered Types of Equipment" shall mean all valves, connectors, pumps, agitators, and open-ended line closure devices in light liquid, heavy liquid, or gas/vapor service as regulated under a federal,

state, or local leak detection and repair program.

"Directed Maintenance" shall mean the utilization of concurrent monitoring (or other method that indicates the relative size of the leak) to repair a leaking piece of equipment to achieve the best repair/lowest emission rate reasonably possible.

"DOR" shall mean Delay of Repair.

"ELP" shall mean the Enhanced Leak Detection and Repair Program specified in Appendix A of this Decree.

"Facility" shall have the meaning set forth in Section III, paragraph 7.i. of this Decree.

"LDAR" shall mean Leak Detection and Repair.

"LDAR Audit Commencement Date" or "Commencement of an LDAR Audit" shall mean the first day of the on-site inspection that accompanies an LDAR audit.

"Maintenance Shutdown" shall mean the partial or full shutdown of a Covered Process Unit that either is done for the purpose of scheduled maintenance or lasts longer than 14 calendar days. The following are not considered maintenance shutdowns: (1) an unscheduled work practice or unscheduled operational procedure that stops production from a process unit or part of a process unit for less than 24 hours; and (2) an unscheduled work practice or unscheduled operational procedure that would stop production from a process unit or part of a process unit for a shorter period of time than would be required to clear the process unit or part of the process unit of materials and start up the unit, and would result in greater emissions than delay of repair of leaking components until the next scheduled process unit shutdown.

"Method 21" shall mean the test method found at 40 C.F.R. Part 60, Appendix A, Method 21.

"New Valve" shall mean a valve that is not replacing an Existing Valve (as defined in Paragraph 17.a. of Subsection G of this Enhanced LDAR Program).

"Non-Volatile Hazardous Air Pollutant Covered Process Unit" or "Non-VHAP Covered Process Unit" shall mean a Covered Process Unit that does not meet the definition of a VHAP Covered Process Unit.

"OEL" or "Open-Ended Line" shall mean an open-ended valve or line, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

"OELCD" shall mean an open-ended valve or line at the closure device (i.e., secondary valves, caps, blind flanges, or plugs on OELs, that are not considered connectors).

"Screening Value" shall mean the highest emission level that is recorded at each piece of equipment as it is monitored in compliance with Method 21.

"Subsection" shall mean a portion of this Appendix A identified by a capital letter.

"Volatile Hazardous Air Pollutant Covered Process Unit" or "VHAP Covered Process Unit" shall

mean:

For the FPC TX Facility, the EDC, EG, VCM, and PVC units, and

For the FPC LA Facility, the VCM and PVC units.

Subsection A (Applicability of ELP)

- 1. In order to minimize or eliminate fugitive emissions of volatile organic compounds ("VOCs"), benzene, volatile hazardous air pollutants ("VHAPs"), and organic hazardous air pollutants ("HAPs") from equipment in light liquid and/or in gas/vapor service, Defendants shall undertake the enhancements identified in this Section to its leak detection and repair ("LDAR") programs for each of the Covered Facilities under 40 C.F.R. Part 60, Subparts DDD, KKK, VV, and VVa; Part 61, Subparts F, J, and V; Part 63, Subparts F, H and UU; and applicable state and local LDAR requirements. The terms "equipment," "in light liquid service" and "in gas/vapor service" shall have the respective definitions set forth in the applicable provisions of 40 C.F.R. Part 60, Subpart VV; Part 61, Subparts F, J, and V; Part 63, Subparts F, H and UU and applicable state and local LDAR regulations.
- 2. The requirements of this ELP shall apply to all Covered Equipment except that the requirements of Paragraphs 3 and 31 (Subsection K (Certification of Compliance)) shall apply to all equipment at the Facility that is regulated under any federal, state, or local leak detection and repair program. The requirements of this ELP are in addition to, and not in lieu of, the requirements of any other LDAR regulation that may be applicable to a piece of Covered Equipment. If there is a conflict between a federal, state, or local LDAR regulation and this ELP, Formosa shall follow the more stringent of the requirements.

Subsection B (Written Facility-Wide LDAR Program Procedures)

- 3. By no later than three (3) months after the Date of Lodging of this Consent Decree, Defendants shall develop a written facility-wide LDAR Program, or modify its current written LDAR Program, to ensure compliance with all federal, state, and local LDAR regulations applicable to each of the Covered Process Units. Defendants shall review and update as necessary the LDAR Program on an annual basis by no later than December 31 of each year. The LDAR Program for each Covered Process Unit shall include, at a minimum:
- a. an identification system of all equipment in light liquid and/or in gas/vapor service that is subject to periodic monitoring requirements via Method 21, or other methods, under any applicable federal, state, or local LDAR regulation;
- b. procedures for identifying leaking equipment within each Covered Process Unit;
 - c. procedures for repairing and keeping track of leaking equipment;
- d. a tracking program (e.g., Management of Change) that ensures that new Covered Equipment added to the Facilities for any reason are integrated into the LDAR program and that Covered Equipment that is taken out of service is removed from the LDAR program;

e. procedures for quality assurance/quality control ("QA/QC") reviews of all data generated by LDAR monitoring technicians; and

f. a description of each Covered Facility's LDAR monitoring organization and a designation of the person or position responsible for LDAR management and who has the authority, consistent with Defendants' management authorities, to implement LDAR improvements at the Facility, as needed, including the roles and responsibilities of all employee and contractor personnel assigned to LDAR functions at the Facilities, and how the number of personnel dedicated to the LDAR functions is sufficient to satisfy the requirements of the LDAR program.

Subsection C (Leak Definitions)

- 4. By no later than six (6) months after the Date of Lodging of this Consent Decree, for all Covered Equipment, except for that Covered Equipment in heavy liquid service, Defendants shall use the following internal leak definitions, unless otherwise indicated herein, or unless more frequent monitoring is required by permit, or federal, state, or local laws or regulations.
- a. Valves -- 250 ppm VOCs (except that in the FHC Unit, Defendants shall begin using an internal leak definition of 250 ppm VOCs within 24 months of the Date of Lodging of this Decree).

b. Connectors -

250 ppm VOCs for connectors that are currently regulated and required to be monitored by federal, state, or local law, or permit, or are voluntarily monitored at FPC LA, using EPA Method 21.

For connectors that are currently regulated but not required to be monitored using EPA Method 21 (e.g., connectors regulated by 40 C.F.R. Part 60, Subpart VV), by no later than 18 months after the Date of Lodging of this Consent Decree, Defendants will determine which of the following compliance alternatives will be utilized at each Facility and report the alternative chosen in the next Annual Report:

Option A: Utilize the EPA Alternative Work Practice To Detect Leaks from Equipment (as per 73 Fed. Reg. 78199, December 22, 2008, or as amended) (the "EPA AWP"); or,

Option B: Utilize EPA Method 21 with an internal leak definition of 250 ppm VOC.

Notwithstanding the foregoing, for connectors in light liquid and/or gas/vapor service that are currently regulated but not required to be monitored using EPA Method 21, by no later than 18 months after the Date of Lodging of this Consent Decree, Defendants must monitor this affected equipment once using EPA Method 21 with an internal leak definition of 250 ppm VOC. After initial monitoring using EPA's Method 21, Defendants may use the compliance alternative chosen and reported upon (i.e., Option A or B) for subsequent monitoring.

- c. Pumps -- 500 ppm. Reciprocating pumps shall retain their applicable regulatory leak definition.
 - d. Agitators -- 500 ppm.

e. Open-Ended Line Closure Devices. For open-ended line closure devices that are currently regulated but not required to be monitored using EPA Method 21, Defendants will determine which of the following compliance alternatives will be utilized in each Covered Process Unit at each Covered Facility and report the alternative chosen in the next Annual Report:

Option A: Utilize the EPA AWP; or,

Option B: Utilize EPA Method 21 with an internal leak definition of 250 ppm

VOC.

Notwithstanding the foregoing, for open-ended line closure devices that are currently regulated but not required to be monitored using EPA Method 21, by no later than 18 months after the Date of Lodging of this Consent Decree, Defendants must monitor this affected equipment once using EPA Method 21 with an internal leak definition of 250 ppm VOC. After initial monitoring using EPA's Method 21, Defendants may use the compliance alternative chosen and reported upon (i.e., Option A or B) for subsequent monitoring.

5. Reporting of Valves, Connectors, Pumps and Agitators Based on the Internal Leak Definitions. For regulatory reporting purposes (i.e., reports to federal, state, or local agencies not required by this Decree), Defendants may continue to report leak rates against the applicable regulatory leak definition or use the lower, internal leak definitions specified in this Subsection C. Defendants shall identify in the applicable report which definition is being used.

Subsection D (Monitoring Frequency and Equipment)

- 6. By no later than six (6) months after the Date of Lodging of this Consent Decree, and except as provided in paragraph 6.e., for all Covered Equipment, except for that Covered Equipment in heavy liquid service, the Facilities shall comply with the following periodic monitoring frequencies, unless more frequent monitoring is required by federal, state, or local laws or regulations:
 - a. Valves Quarterly
 - b. Connectors -- Annually
- c. Pumps/Agitators -- Monthly, except that monitoring shall not be required for pumps and agitators that are seal-less or that are equipped with a dual mechanical seal system that complies with the requirements of 40 C.F.R. §§ 63.163(e) or 63.173(d), as applicable.
- d. Open-Ended Line Closure Devices (i.e., secondary valves, caps, blind flanges, or plugs on open-ended lines, that are not considered connectors) (monitoring will be done at the closure device; if a valve serves as the closure device, monitoring shall be done in the same manner as any other valve) Annually
- e. Any pieces of Covered Equipment that are designated as "unsafe-to-monitor" or "difficult-to-monitor" in accordance with the applicable provisions of 40 C.F.R. Part 60, Subparts DDD, KKK, VV, and VVa; Part 61, Subparts F, J, and V; or Part 63, Subparts F, H and UU, shall be exempt from the requirements of Subparagraphs 6.a. through 6.d., so long as Defendants satisfy the applicable conditions and requirements of 40 C.F.R. Part 60, Subparts DDD, KKK, VV, and VVa; Part 61, Subparts F, J, and V; or Part 63, Subparts F, H and UU. In the case of connectors that do not have applicable "unsafe-to-monitor" or "inaccessible" provisions (e.g., connectors subject to 40 C.F.R. Part

- 60, Subpart VV), Defendants shall follow the "unsafe-to-monitor" and "inaccessible" provisions of 40 C.F.R. Part 63, Subpart H, for such connectors. In the case of OELCDs, which do not have applicable "unsafe-to-monitor" provisions, Defendants shall follow the "unsafe-to-monitor" and "inaccessible" provisions for connectors found in 40 C.F.R. Part 63, Subpart H, for such OELCDs. In no event shall any "difficult-to-monitor" provisions apply to any connectors or OELCDs.
- 7. Use of EPA AWP for Monitoring. Notwithstanding the monitoring frequency required by the immediately preceding Paragraph 6, where a Facility has chosen Option A (EPA AWP) in accordance with Subsection D for any Covered Process Unit, the Facility shall monitor connectors and/or OELCDs in VOC service once every two (2) months, after the initial Method 21 monitoring required by Subsection C. Each day that the Optical Gas Imaging instrument is used to demonstrate compliance with this Consent Decree, prior to beginning any leak monitoring work, Defendants will check and calibrate the instrument according to the manufacturer's instructions.

Subsection E (Repairs)

- 8. By no later than 5 days after detecting a leak (other than leaks from equipment not subject to regulation which are detected using Optical Gas Imaging instruments), the Facility shall perform a first attempt at repair. By no later than 15 days after detection, the Facility shall perform a final attempt at repair or may place the piece of equipment on the Delay of Repair list provided that Defendant has complied with all applicable regulations and with the requirements of Paragraphs 8-12 and 15.
- 9. The Facilities shall perform "Directed Maintenance" during all repair attempts.
- Drill-and-Tap. By no later than nine (9) months after the Date of Lodging of this Consent Decree, for valves in light liquid service and/or gas/vapor service, when a valve is leaking above 2,500 ppm VOC, and other repair attempts have proven ineffective and/or the Facility is not able to remove the leaking valve from service, the Facility shall use the drill-and-tap repair method prior to placing the leaking valve on the "delay of repair" list unless there is a major safety, mechanical, product quality, or environmental issue with repairing the valve using this method. The Facility shall document the reason(s) why drill-and-tap repair was (were) not performed prior to placing any valve on the "delay of repair" list. The Facility shall attempt at least two drill-and-tap repairs (e.g., two attempts at injecting the valve) before placing a valve on the "delay of repair" list. By no later than 18 months of the Date of Lodging of this Decree, the drill-and-tap procedures in this Paragraph shall apply to all valves leaking above 500 ppm VOC.
- 11. For each leak, Defendants shall record the following information: the date of all repair attempts; the repair methods used during each attempt; the date, time and Screening Values for all remonitoring events, and the information required under Paragraph15 for Covered Equipment placed on the DOR list.
- 12. Nothing in Paragraphs 8-14 is intended to prevent Defendants from taking a leaking piece of Covered Equipment out of service; provided however, that prior to placing the leaking piece of Covered Equipment back in service, Defendants must repair the leak or must comply with the requirements of "Part F" (Delay of Repair) to place the piece of Covered Equipment on the DOR list.

- 13. <u>Leaks from non-Covered Equipment</u>. For any leaks detected from currently non-Covered Equipment (unless such non-Covered Equipment is "unsafe to repair" or "inaccessible" as those terms are used in 40 C.F.R. Part 63, Subpart H) using the EPA AWP, Defendants shall, unless a shorter time period applies under federal, state or local law: (a) make a first attempt at repair within fifteen (15) calendar days of identifying the leak and a second attempt at repair, if necessary, within forty-five (45) calendar days of identifying the leak; or (b) if necessary, place the equipment on the DOR list until the next turnaround at the relevant Covered Process Unit.
- Additional Corrective Action. If optical gas imaging equipment is used for monitoring at a 14. Covered Facility in accordance with this Subsection C, and Defendant(s) identify a leak from non-Covered Equipment at the time of the monitoring event, and such leak is an unauthorized release under federal, regional, state or local air and release reporting laws, Defendant(s) shall comply with all applicable release notification requirements, including, without limitation, release notification requirements under CERCLA §103 and EPCRA § 304, and, within 30 days of identifying such leak, take corrective action to eliminate the release caused by the leak. In the event that Defendant(s) cannot eliminate the release caused by the leak within 60 days of identifying such leak, Defendant(s) shall submit a written request no later than 90 days after identifying such leak to obtain authorization for the release from the appropriate governmental authority if the release is unauthorized, or will develop and implement a corrective action plan to eliminate the leak. Defendant(s) shall have up to two years from the date of the written request to obtain authorization. Notwithstanding the foregoing, Defendant(s) shall comply with all applicable federal, state, and local regulations regarding such leak. Compliance with the requirements of this Decree does not constitute compliance with laws or regulations that may be more stringent than the requirements of this Decree.

Subsection F (Delay of Repair)

- 15. Beginning no later than three (3) months after the Date of Lodging of this Consent Decree, for all Covered Equipment placed on the DOR list, Defendants shall:
- a. Require sign-off from the relevant Covered Process Unit supervisor or person of similar authority that the piece of Covered Equipment is technically infeasible to repair without a process unit shutdown; and
- b. Undertake periodic monitoring, at the frequency required for other pieces of Covered Equipment of that type in the process unit, of the Covered Equipment placed on the DOR list.

Subsection G (Equipment Replacement/Improvement)

16. Valve and Connector Replacement and Improvement Program. Commencing no later than six (6) months after the Leak Definitions of Subsection C are effective and continuing until termination of this Decree, Formosa shall implement the program set forth in Paragraphs 17 to 19 to replace, and/or improve the emissions performance of Subsection C affected valves and connectors in each VHAP and Non-VHAP Covered Process Unit.

17. Valves in VHAP Covered Process Units

a. <u>List of All Valves in the VHAP Covered Process Units</u>. By no later than 30 days after the Date of Lodging of this Decree, Formosa shall submit to EPA a list of all valves in each

VHAP Covered Process Unit that are in existence as of the Date of Lodging. The valves on this list shall be the "Existing Valves" for purposes of this Paragraph 17.

- b. <u>Installing New Valves</u>. Except as provided in Paragraph 20, Formosa shall ensure that each new valve that it installs in any VHAP Covered Process Unit either is a Certified Low-Leaking Valve or is fitted with Certified Low-Leaking Valve Packing Technology. In the event that a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology is commercially unavailable for the service and operating conditions of the new valve, Formosa shall install a valve with the best performing (i.e., the least likely to leak) valve commercially available for the service and operating conditions of the valve.
- Replacing or Repacking Existing Valves that Leak. Commencing no later than six (6) months after the Leak Definitions of Subsection C are effective, except as provided in Paragraph 20, for each Existing Valve in each VHAP Covered Process Unit that has a Screening Value at or above 250 ppm VOC during any two monitoring events during a rolling 12-month period, Formosa shall replace or repack the Existing Valve with a Certified Low-Leaking Valve or with Certified Low-Leaking Valve Packing Technology. In the event that a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology is commercially unavailable for the service and operating conditions of the valve, Formosa shall replace the valve with the best performing valve (i.e., the least likely to leak) commercially available for the service and operating conditions of the valve. Formosa shall undertake this replacement or repacking by no later than 30 days after the monitoring event that triggers the replacement or repacking requirement, unless the replacement or repacking requires a partial or full process unit shutdown. If the replacement or repacking requires a partial or full process unit shutdown, Formosa shall undertake the replacement or upgrade during the first Maintenance Shutdown that follows the monitoring event that triggers the requirement to replace or repack the valve. If Formosa completes the replacement or repacking within 30 days of detecting the leak, Formosa shall not be required to comply with Subsection E of this ELP. If Formosa does not complete the replacement or repacking within 30 days, or if, at the time of the leak detection, Formosa reasonably can anticipate that it might not be able to complete the replacement or repacking within 30 days, Formosa shall comply with all applicable requirements of Subsection E.

18. Connectors in VHAP Covered Process Units

a. <u>Connector Replacement and Improvement Descriptions</u>. For purposes of this Paragraph 18, for each of the following types of connectors, the following type of replacement or improvement shall apply:

Connector Type	Replacement or Improvement Description
Flanged	Replacement or improvement of the gasket
Threaded	Replacement of the connector
Compression	Replacement of the connector
CamLock	Replacement or improvement of the gasket

Quick Connect

Replacement or improvement of the gasket, if applicable, or replacement of the connector if

there is no gasket

Any type

Eliminate, at Formosa's sole discretion (e.g., through welding, pipe replacement, etc.)

- b. <u>Installing New Connectors</u>. Formosa shall ensure that each new connector it installs in each VHAP Covered Process Unit is the best performing (i.e., the least likely to leak) connector commercially available for the service and operating conditions that the connector is in.
- Replacing or Improving Connectors. Commencing no later than six (6) months after the Leak Definitions of Subsection C are effective, for each connector in each VHAP Covered Process Unit that for two (2) out of three (3) consecutive monitoring periods occurring after implementation of this program has a Screening Value at or above 250 ppm VOC, Formosa shall replace or improve the connector in accordance with the applicable replacement or improvement described in Subparagraph 18.a. The replacement or improvement shall be with the best performing (i.e., the least likely to leak) replacement/improvement commercially available for the service and operating conditions that the connector is in. Formosa shall undertake the replacement or improvement within 30 days after the monitoring event that triggers the replacement or improvement, except where the replacement or improvement requires a partial or full process unit shutdown. If the replacement or improvement requires a partial or full process unit shutdown, Formosa shall undertake the replacement or improvement during the first Maintenance Shutdown that follows the monitoring event that triggers the requirement to replace or improve the connector. If Formosa completes the replacement or improvement within 30 days of detecting the leak, Formosa shall not be required to comply with Subsection E of this ELP. If Formosa does not complete the replacement or improvement within 30 days, or if, at the time of the leak detection, Formosa reasonably can anticipate that it might not be able to complete the replacement or improvement within 30 days, Formosa shall comply with all applicable requirements of Subsection E.
- 19. Replacing or Repacking Valves that are Chronic Leakers in Non-VHAP Covered Process
 Units. Except as provided in Paragraph 20, Formosa shall replace or repack each valve in each Non-VHAP Covered Process Unit that is a "chronic leaker" with a Certified Low-Leaking Valve or with Certified Low-Leaking Valve Packing Technology. In the event that a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology is commercially unavailable for the service and operating conditions of the valve, Formosa shall replace the valve with the best performing valve (i.e., least likely to leak) commercially available for the service and operating conditions of the valve during the first Maintenance Shutdown that follows the monitoring event that triggers the replacement or repacking requirement. A valve in a non-VHAP Covered Process Unit is a "chronic leaker" under this Paragraph if it leaks above 1000 ppm VOC in any three (3) out of four (4) consecutive quarters (based on quarterly monitoring) after the valve was last repaired.
- 20. <u>Commercial Unavailability of a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology</u>. Formosa shall not be required to utilize a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology to replace or repack a valve if a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology is commercially unavailable for the service and operating conditions of the valve. Prior to claiming this commercial unavailability exemption, Formosa must contact a reasonable number of vendors of valves and obtain a written

representation or equivalent documentation from each vendor that the particular valve that Formosa needs is commercially unavailable for the service and operating conditions that the valve is in either as a Certified Low-Leaking Valve or with Certified Low-Leaking Valve Packing Technology. In the Compliance Status Reports due under Subsection N, Formosa shall: (i) identify each valve for which it could not comply with the requirement to replace or repack the valve with a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology; (ii) identify the vendors it contacted to determine the unavailability of such a Valve or Packing Technology; and (iii) include the written representations or documentation that Formosa secured from each vendor regarding the unavailability. Defendants may satisfy the commercial unavailability exemption by completing a valve survey no later than six (6) months after the Leak Definitions of Subsection C are effective to document the commercial unavailability of Certified Low-Leaking Valves or Certified Low-Leaking Valve Packing Technology ("Valve Technology Survey"). In such event, Defendants shall comply with the vendor inquiry requirements of this Paragraph 20 and submit the Valve Technology Survey with the first Compliance Status Report under Subsection M. Such survey shall include the information required in Subparagraphs 20(i) through (iii) above. Any changes in commercial unavailability will be updated thereafter within the next Compliance Status Report(s).

21. Records of Certified Low-Leaking Valves and Certified Low-Leaking Valve Packing Technology. Prior to installing any Certified Low-Leaking Valves or Certified Low-Leaking Valve Packing Technology, Formosa shall secure from each manufacturer documentation that demonstrates that the proposed valve or packing technology meets the definition of "Certified Low-Leaking Valve" and/or "Certified Low-Leaking Valve Packing Technology." Formosa shall retain that documentation for the duration of this Consent Decree and make it available upon request.

Subsection H (Training)

- 22. By no later than six (6) months after the Date of Lodging of this Consent Decree, the Facilities shall develop a training protocol and implement a training program at each Covered Facility which includes the following features:
- a. for Defendants' personnel newly-assigned to LDAR responsibilities, Defendants shall require LDAR training prior to each employee beginning such work;
- b. for all Defendant personnel assigned LDAR responsibilities; Defendants shall require completion of annual (i.e., once each calendar year) LDAR training;
- c. for all other Facility operations and maintenance personnel (including contract personnel) who have duties relevant to LDAR, Defendants shall provide and require completion of an initial training program that includes instruction on aspects of LDAR that are relevant to the person's duties. For the individuals covered by this Paragraph, "refresher" training in LDAR shall be performed at least annually during the term of this Consent Decree.

Subsection I (Quality Assurance ("QA")/Quality Control ("QC"))

23. <u>Daily Certification by Monitoring Technicians.</u> Commencing by no later than three (3) months after the Date of Lodging of this Consent Decree, on each day that monitoring occurs, at the end of such monitoring, Defendants shall ensure that each monitoring technician certifies that the data collected accurately represents the monitoring performed for that day by requiring the monitoring technician to sign a form that includes the following certification:

On [insert date], I reviewed the monitoring data that I collected today and that to the best of my knowledge and belief, the data accurately represents the monitoring that I performed today.

- 24. Commencing by no later than the first full calendar quarter after the Date of Lodging of this Decree, during each calendar quarter, at unannounced times, an LDAR-trained employee of the Defendants, who does not serve as an LDAR monitoring technician on a routine basis, shall undertake the following:
 - a. review whether any pieces of equipment that are required to be in the LDAR program are not included;
 - b. verify that equipment was monitored at the appropriate frequency;
 - c. verify that proper documentation and sign-offs have been recorded for all equipment placed on the DOR list;
 - d. verify that repairs have been performed in the required periods;
 - e. review monitoring data and equipment counts (e.g., number of pieces of equipment monitored per day) for feasibility and unusual trends;
 - f. verify that proper calibration records and monitoring instrument maintenance information are maintained; and
 - g. verify that other LDAR program records are maintained as required.

Defendants shall maintain logs that record the date and time that the actions in this Paragraph were undertaken.

Subsection J (LDAR Audits and Corrective Action)

- 25. Defendants shall conduct LDAR audits pursuant to the schedule in Paragraph 26 and the requirements of Paragraph 27. To the extent that, at any time prior to termination of this Consent Decree, Defendant(s) uses a third party to undertake its routine LDAR monitoring, Defendant(s) shall not use the same third party to undertake its LDAR audits.
- 26. Until termination of this Decree, Defendants shall ensure that an LDAR audit at each Facility is conducted every other year in accordance with the following schedule: the Initial LDAR Audit Commencement Date for each Facility shall be no later than six (6) months after the Date of Lodging of this Consent Decree. For each subsequent LDAR audit, the LDAR Audit Completion Date shall occur within the same calendar quarter that the first LDAR Audit Completion Date occurred. The initial LDAR audit shall be conducted by a third party. Following the initial audit, Defendants must conduct third party LDAR audits every two years (i.e., three (3) audits within five (5) years). Defendant personnel may accompany the third party audit team for educational purposes, but may not

undertake any responsibility for audit activities, except for providing requested information to the third-party audit team.

- 27. Each LDAR audit shall include but not be limited to reviewing compliance with all applicable LDAR regulations, observing LDAR monitoring technicians in the field to ensure monitoring is being conducted as required, reviewing and/or verifying the same items that are required to be reviewed and/or verified in Subparagraphs 24.a 24.g (i.e., reviewing whether any pieces of equipment required to be in the LDAR program are not included, verifying that equipment was monitored at the appropriate frequency, etc.), and performing the following activities:
 - a. Calculating Comparative Monitoring Audit Leak Percentages. Valves and pumps, except those valves and pumps in heavy liquid service, shall be monitored in order to calculate a leak percentage for each Covered Process Unit broken down by equipment type (i.e., valves and pumps). The monitoring that takes place during the audit shall be called "comparative monitoring" and the leak percentages derived from the comparative monitoring shall be called the "Comparative Monitoring Audit Leak Percentages."
 - b. Calculating the Historic, Average Leak Percentage from Prior Periodic Monitoring Events. For each Covered Process Unit that is audited, the historic, average leak percentage from prior periodic monitoring events, broken down by equipment type (i.e., valves and pumps), shall be calculated. The following number of complete monitoring periods immediately preceding the comparative monitoring audit shall be used for this purpose: valves 4 periods; and pumps 12 periods.
 - c. <u>Calculating the Comparative Monitoring Leak Ratio</u>. For each Covered Process Unit and each type of equipment (valves and pumps), the ratio of the comparative monitoring audit leak percentage from Paragraph 27.a to the historic periodic monitoring leak percentage from Paragraph 27.b shall be calculated. This ratio shall be called the "Comparative Monitoring Leak Ratio." If a calculated ratio yields an infinite result, it shall be assumed that one leaking piece of equipment was found in the process unit through routine monitoring during the 12-month period before the audit and the ratio shall be recalculated.

During each LDAR Audit, leak rates shall be calculated for each Covered Process Unit where comparative monitoring was performed. During each LDAR Audit, Defendants shall conduct comparative monitoring in at least four (4) Covered Process Units at FPC TX and in all Covered Process Units at FPC LA. Defendants shall monitor Covered Equipment at a statistically representative percentage in each process unit audited. Comparative monitoring audits at FPC TX shall rotate, such that a different process unit at the site is audited before a subsequent audit of a process unit is performed.

In addition to the foregoing items, LDAR audits after the Initial LDAR audit shall include reviewing the Facility's compliance with this ELP.

28. <u>Initial Audit Report</u>. Defendants shall submit an Initial Audit Report to EPA within 180 days of completing the Initial Audit, but in no event later than one (1) year after the Date of Lodging of this Decree. The Report shall describe the results of the Initial LDAR Audit, disclose all areas of identified

non-compliance, and certify Defendant's compliance, except for the identified deficiencies. Within the Report, Defendants shall certify to EPA that: (i) the Covered Facilities are in compliance with all applicable LDAR regulations; (ii) Defendants have completed all corrective actions, if applicable, or is in the process of completing all corrective actions pursuant to a Corrective Action Plan; and (iii) all equipment at the Covered Facilities that are regulated under a federal, state, or local LDAR program have been identified and included in the Covered Facilities' LDAR programs(s). Defendants shall submit a copy of the Corrective Action Plan with the Initial Audit Report.

29. When More Frequent Periodic Monitoring is Required. If a comparative monitoring audit leak percentage calculated pursuant to Paragraph 27 triggers a more frequent monitoring schedule under any applicable federal, state, or local law or regulation than the frequencies listed in the applicable Paragraph in Subsection C – that is, either Paragraph 4, 5, or 6 – for the equipment type in that Covered Process Unit, Defendants shall monitor the affected type of equipment at the greater frequency unless and until less frequent monitoring is again allowed under the specific federal, state, or local law or regulation. At no time may Defendants monitor at intervals less frequently than those in the applicable Paragraph in Subsection C.

Corrective Action

- a. If the results of any of the LDAR Audits conducted pursuant to this Consent Decree identify any deficiencies, Defendants shall implement, as soon as practicable, all steps necessary to correct or otherwise address such deficiencies and to prevent, to the extent practicable, a recurrence of the cause of such deficiencies ("Corrective Action").
- b. For purposes of this Paragraph, in addition to any areas of non-compliance with applicable laws or regulations, or specific LDAR provisions of this Consent Decree identified during the audit, a Comparative Monitoring Leak Ratio calculated pursuant to Paragraph 27.c of 3.0 or higher also shall be deemed cause for Corrective Action.

Subsection K (Certification of Compliance)

Within 180 days after the Initial LDAR Audit Completion Date, Defendants shall certify to EPA that: (i) the Facility is in compliance with all applicable LDAR regulations and this ELP; (ii) Defendant(s) has completed all corrective actions, if applicable, or is in the process of completing all required Corrective Action; and (iii) all equipment at the Facility that is regulated under a federal, state, or local leak detection and repair program has been identified and included in the Facility's LDAR program.

Subsection L (Recordkeeping)

- 32. Defendants shall keep all original records, including copies of all LDAR audits, to document compliance with the requirements of this ELP for at least two years after termination of this Decree, and shall maintain a written record of all Corrective Action that Defendants takes in response to any deficiencies identified in the LDAR Audits.
- 33. After the completion of any LDAR Audit, Defendants shall include the following information in the next Annual Report due under this Consent Decree: (i) a summary, including findings, of each such LDAR Audit; (ii) a list of corrective actions taken during the reporting period, if necessary; and (iii) any schedule for implementing future corrective actions, if necessary. Upon request by EPA,

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Defendants shall make all such documents available to EPA and shall provide, in their original electronic format, all LDAR monitoring data geated during the life offis Consent Decree.

Subsection M (LDAR Reporting and Recordkeeping Requirements)

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submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and impsonment for knowing violations.

APPENDIX B—BENZENE WASTE OPERATIONS NESHAP

1. Benzene Waste Operations NESHAP – FPC TX

In addition to continuing to comply with all applicable requirements of 40 C.F.R. Part 61, Subpart FF ("Benzene Waste Operations NESHAP," "BWON," or "Subpart FF"), FPC TX agrees to undertake the measures set forth in this Appendix B to ensure continuing compliance with Subpart FF and to minimize or eliminate fugitive benzene waste emissions at FPC TX.

2. Subpart FF Compliance Status.

As of the Date of Lodging, FPC TX has a Total Annual Benzene ("TAB") quantity that is greater than 10 Megagrams ("Mg"). No later than three (3) months after the Date of Lodging of this Decree, FPC TX will comply with the compliance option set forth at 40 C.F.R. § 61.342(c) (hereafter referred to as the "2 Mg Compliance Option").

3. One-Time Review and Verification of OLI/OLII's TAB and Compliance Status.

- a. One-Time Review and Verification Process. FPC TX has retained a third party to complete a one-time review and verification of Olefins I and Olefins II's ("OLI/OLII") TAB. The one-time review and verification for OLI/OLII shall be completed by no later than three (3) months after the Date of Lodging of this Decree. The review and verification process for OLI/OLII shall include, but not be limited to:
- (1) an identification of each waste stream that is required to be included in OLI/OLII's TAB (e.g., slop oil, tank water draws, spent caustic, other sample wastes, maintenance wastes, and turnaround wastes);
- (2) a review and identification of the calculations and/or measurements used to determine the flows of each waste stream for the purpose of ensuring the accuracy of the annual waste quantity for each waste stream;
- (3) an identification of the benzene concentration in each waste stream, including sampling for benzene concentration, consistent with the requirements of 40 C.F.R. § 61.355(c)(1) and (3); provided, however, that previous analytical data or documented knowledge of waste streams may be used, pursuant to 40 C.F.R. § 61.355(c)(2), for streams not sampled;
- (4) an identification of whether or not the waste stream is controlled consistent with the applicable requirements of Subpart FF; and
- (5) an identification of any existing noncompliance with the requirements of Subpart FF.

No later than four (4) months after the Date of Lodging of this Decree, FPC TX shall submit to EPA a BWON compliance review and verification report ("Compliance Review and Verification Report") for OLI/OLII that sets forth the results of this review, including but not limited to, the items identified in Subparagraphs (1) through (5) of this Paragraph.

4. Implementation of Actions Necessary to Correct Non-Compliance or to Come Into Compliance.

a. Amended TAB Reports. If the results of the BWON Compliance Review and Verification Report indicate that FPC TX's most recently filed TAB report required by 40 C.F.R. § 61.357(d) is inaccurate and/or does not satisfy the requirements of Subpart FF, FPC TX shall submit, by no later than 60 days after submission to EPA of the BWON Compliance Review and Verification Report, an amended TAB report to EPA. In the event that FPC TX has submitted an amended TAB report to EPA prior to the Date of Lodging of this Decree, FPC TX shall submit a copy of that amended TAB report with the BWON Compliance Review and Verification Report.

b. BWON Corrective Action Measures.

2 Mg Compliance Option. If the results of the BWON Compliance Review and Verification Report indicate that FPC TX is not in compliance with the 2 Mg Compliance Option, FPC TX shall submit to EPA for review and comment, by no later than 90 days after submission of the BWON Compliance Review and Verification Report(s), a BWON Corrective Action Plan that identifies with specificity (a) the compliance strategy and schedule that FPC TX shall implement to ensure that FPC TX complies with the 2 Mg Compliance Option as soon as practicable; or (b) a compliance strategy and schedule that FPC TX will implement to ensure that it complies with the 6 BQ Compliance Option set forth in 40 C.F.R. § 61.342(e). FPC TX shall implement the plan according to the schedule provided in such plan unless and until EPA comments on the plan.

c. Certification of Compliance. By no later than thirty (30) days after completion of the implementation of all corrective actions, if any, required pursuant to Corrective Action Measures subparagraphs to come into compliance with the 2 Mg Compliance Option, FPC TX shall submit a report to EPA certifying that FPC TX complies with the Benzene Waste Operations NESHAP.

5. Carbon Canisters

FPC TX shall comply with the requirements of this Paragraph at FPC TX where carbon canisters are utilized as a control device under the Benzene Waste Operations NESHAP.

- a. By no later than six (6) months after the Date of Lodging of this Decree, FPC TX shall complete installation of primary and secondary carbon canisters at locations currently using single canisters and shall operate them in series. As part of the first Annual Report (Section VI of this Decree) due following completion of the installation of the dual canisters, FPC TX shall notify EPA that installation has been completed (if necessary). The report shall include a list of all locations in FPC TX where carbon canister systems are used as control devices under Subpart FF.
- b. For dual carbon canister systems, "breakthrough" between the primary and secondary canister is defined as any reading equal to or greater than 50 ppm VOC or 1 ppm benzene (depending upon the constituent that FPC TX decides to monitor) when monitoring on a monthly frequency. If weekly monitoring is required pursuant to Subparagraph 5.d. below, "breakthrough" shall be defined as any reading equal to or greater than 5 ppm benzene. At its option, FPC TX may utilize a concentration for "breakthrough" that is lower than 50 ppm VOC or 1 ppm benzene.
- c. FPC TX shall monitor for breakthrough between the primary and secondary carbon canisters monthly at times when there is actual flow to the carbon canister or in accordance with the frequency specified in 40 C.F.R. § 61.354(d), whichever is more frequent. This requirement shall

commence: (i) By no later than three (3) months after the Date of Lodging of this Decree, where dual carbon canisters are currently installed and put into service prior to the Date of Lodging; and (ii) within thirty (30) days after installation of any new dual carbon canister system subsequent to Date of Lodging. In the event there is no flow to the canister, FPC TX shall document the lack of flow and remonitor at the next monitoring period.

- d. If FPC TX monitors a canister system for benzene and detects between 1 ppm and 5 ppm benzene between the primary and secondary canisters, then FPC TX shall begin monitoring for breakthrough (at 5 ppm benzene) between the primary and secondary carbon canisters weekly, or change out the canister.
- e. FPC TX shall replace the original primary carbon canister (or route the flow to an appropriate alternative control device) immediately when breakthrough is detected between the primary and secondary canister. For purposes of this Subparagraph, "immediately" shall mean within eight (8) hours of the detection of a breakthrough for canisters of 55 gallons or less, and within twenty-four (24) hours of the detection of a breakthrough for canisters greater than 55 gallons. If FPC TX chooses to define breakthrough for primary carbon canister replacement at 5 ppm or lower VOC, FPC TX may replace primary canisters of 55 gallons or less within twenty-four (24) hours of detecting breakthrough. In lieu of replacing the primary canister immediately, FPC TX may elect to monitor the outlet of the secondary canister beginning on the day the breakthrough between the primary and secondary canister is identified and each calendar day thereafter. This daily monitoring shall continue until the primary canister is replaced. If the constituent being monitored (either benzene or VOC) is detected at the outlet of the secondary canister during this period of daily monitoring, both canisters must be replaced within eight (8) hours of the detection of a breakthrough.
- f. Temporary Applications. FPC TX may utilize properly sized single canisters for short-term operations such as with temporary storage tanks or as temporary control devices. For canisters operated as part of a single canister system, breakthrough is defined for purposes of this Consent Decree as any reading equal to or greater than 50 ppm VOC or 1 ppm benzene. FPC TX shall monitor for breakthrough from single carbon canisters each calendar day that there is actual flow to the carbon canister.
- g. FPC TX shall maintain a readily-available supply of fresh carbon canisters at all times where canisters are used as a control device or shall otherwise ensure that such canisters are readily available to implement the requirements of this Paragraph 5.a.
- h. By no later than six (6) months after the Date of Lodging of this Decree, FPC TX will notify EPA of which breakthrough definition (50 ppm VOC or 1 ppm benzene) will be used.

6. Periodic Review of Process Information.

By no later than six (6) months after the Date of Lodging of this Decree, if necessary, FPC TX will modify existing management of change procedures or develop a new program to annually review process and project information at FPC TX, including but not limited to construction projects, to ensure that all new benzene waste streams are included in FPC TX's waste stream inventory during the term of this Consent Decree.

7. Laboratory Audits.

FPC TX will conduct audits of all laboratories that perform analyses of FPC TX's Benzene Waste Operations NESHAP samples to ensure that proper analytical and quality assurance/quality control procedures are followed.

- a. By no later than nine (9) months after the Date of Lodging of this Decree, FPC TX will complete audits of all of the laboratories they use to perform analyses of Benzene Waste Operations NESHAP samples.
- b. During the term of this Consent Decree, FPC TX will conduct subsequent laboratory audits, such that each laboratory is audited every two (2) years.
- c. FPC TX may retain third parties to conduct these audits or use audits conducted by others as its own, but the responsibility and obligation to ensure that FPC TX complies with this Consent Decree and Subpart FF rest solely with FPC TX.

8. Benzene Spills.

Beginning no later than the Date of Entry of this Decree, for each spill at FPC TX, FPC TX shall review the spill to determine if any benzene waste, as defined by Subpart FF, was generated. For each spill involving the release of more than ten (10) pounds benzene in any twenty-hour (24) hour period, FPC TX shall include the benzene generated by the spill in the TAB, and, in the uncontrolled benzene quantity calculations for FPC TX in accordance with the applicable Compliance Option as required by Subpart FF, unless the benzene waste is properly managed in a controlled waste management unit.

9. Training.

- a. By no later than six (6) months after the Date of Lodging of this Decree, FPC TX shall develop and implement a program for annual (i.e., once each calendar year) training for all employees who draw benzene waste samples for Benzene Waste Operations NESHAP purposes.
- b. By no later than six (6) months after the Date of Lodging of this Decree, FPC TX shall complete the development of standard operating procedures (where they do not already exist) for all control devices and treatment processes used to comply with the Benzene Waste Operations NESHAP at FPC TX. By no later than nine (9) months after the Date of Lodging of this Decree, FPC TX shall complete an initial training program regarding these procedures for all operators assigned to the relevant equipment. Comparable training shall also be provided to any persons who subsequently become operators, prior to their assumption of this duty. "Refresher" training in these procedures shall be performed on a three-year cycle (i.e., once every three (3) years) during the term of the Consent Decree.
- c. FPC TX shall assure that the employees of any contractors hired to perform any of the requirements of this Appendix B are properly trained to implement such requirements that they are hired to perform, as under Subparagraphs 9.a. and 9.b.
 - d. Training records shall be kept for a period of three (3) years.

10. Sampling.

FPC TX shall conduct sampling as described by this Paragraph at FPC TX for the purpose of calculating uncontrolled benzene quantities.

- a. Sampling under the 2 Mg Compliance Option.
- (1) By no later than six (6) months after the Date of Lodging of this Decree, FPC TX shall submit to EPA a BWON Sampling Plan. The plan is designed to identify the quarterly benzene quantity in uncontrolled benzene waste streams. The plan shall include, but need not be limited to: (i) proposed sampling locations and methods for flow calculations at the "end of line" of uncontrolled benzene waste streams; and (ii) all uncontrolled waste streams that count toward the 2 Mg/yr calculation and that contain greater than 0.05 Mg/yr of benzene. For sources of uncontrolled benzene waste streams that are non-routine or are otherwise difficult to collect, FPC TX shall provide written support to verify that assumptions made in calculating the TAB are reasonable and appropriate. The BWON Sampling Plan may identify commingled, exempt waste streams for sampling, provided FPC TX demonstrates that the benzene quantity of those commingled streams will not be underestimated.
- (2) FPC TX shall commence sampling under its BWON Sampling Plan during the first full calendar quarter following submittal of the Plan. FPC TX shall take, and have analyzed, at least three (3) representative samples from each identified sampling location. FPC TX shall use the average of all samples taken and the identified flow calculations to determine its quarterly benzene quantity in uncontrolled waste streams and to estimate a calendar year value for FPC TX.
- (3) At the end of each calendar quarter following the commencement of quarterly sampling, FPC TX shall calculate a quarterly uncontrolled benzene quantity and shall estimate a projected calendar year uncontrolled benzene quantity based on the quarterly end of line sampling results, non-end of line sampling results, and the flow calculations. FPC TX shall submit the uncontrolled benzene quantity in the Annual Reports due under Section VII of this Consent Decree. If the projected calendar year calculations demonstrate an uncontrolled benzene quantity of greater than 1.5 Mg/yr, FPC TX shall provide this information to EPA within 30 days of the end of the calendar quarter.
- (4) After at least 8 quarters of sampling under the BWON Sampling Plan under this Paragraph 10, FPC TX may submit a report to EPA that requests a change in the monitoring frequency specified by Subparagraph 10.a. If EPA determines, after an opportunity for consultation with FPC TX, that the information presented in the report supports a change in the monitoring frequency, then the monitoring frequency requirement under Subparagraph 10.a. will be modified in accordance with Section XVII of the Decree (Consent Decree Modifications).
- (5) If changes in processes, operations, or other factors lead FPC TX to conclude that the Sampling Plan may no longer provide an accurate basis for estimating FPC TX's quarterly benzene quantity, then by no later than thirty (30) days after FPC TX determines that the plan no longer provides an accurate measure, FPC TX shall submit to EPA a revised Sampling Plan for EPA approval. In the first full calendar quarter after submitting the revised plan, FPC TX shall implement the revised plan. FPC TX shall continue to implement the revised plan unless and until EPA disapproves the revised plan.
 - b. For purposes of calculating average benzene concentrations under any Compliance

Option, FPC TX shall include all sampling results in the calculation unless FPC TX provides an explanation as to why any sampling results should be excluded.

11. Implementation of Corrective Action.

a. Applicability.

2 Mg Compliance Option. If the calculations in Subparagraph 10.a (3) indicate that the projected calendar year uncontrolled benzene quantity exceeds 1.5 Mg at FPC TX, FPC TX shall submit a written BWON Sampling Report to EPA that evaluates all relevant information and identifies whether any action should be taken to reduce benzene quantities in its waste streams for the remainder of the calendar year. If FPC TX determines that additional actions are necessary to ensure compliance with the 2 Mg Compliance Option at FPC TX, FPC TX shall include in its report a BWON Corrective Action Plan that identifies with specificity (a) the compliance strategy and schedule that FPC TX shall implement to ensure that FPC TX complies with the 2 Mg Compliance Option as soon as practicable; or (b) a compliance strategy and schedule that FPC TX will implement to ensure that it complies with the 6 BQ Compliance Option. FPC TX shall implement the plan according to the schedule provided in such plan.

- b. BWON Sampling Report and Corrective Action Plan. FPC TX shall, in any BWON Corrective Action Plan required by this Paragraph, identify: (i) the cause of the potentially elevated benzene quantities; (ii) all corrective actions that FPC TX has taken or plans to take to ensure that the cause will not recur; and (iii) an appropriate strategy and schedule that FPC TX shall implement to ensure that FPC TX remains in compliance with the 2 Mg Compliance Option or implements the 6 BQ Compliance Option. If FPC TX can identify the reason(s) in any particular calendar quarter that the quarterly and projected annual calculations result in benzene quantities in excess of those identified in this paragraph and states that it does not expect such reason to recur, then FPC TX may exclude the benzene quantity attributable to the identified reason from the projected calendar year quantity. If that exclusion results in no potential violation of the Benzene Waste Operation NESHAP, FPC TX will not be required to implement corrective measures. FPC TX will implement the plan unless and until EPA disapproves.
- c. Third Party Assistance. If calculations indicate that the projected calendar year uncontrolled benzene quantity exceed 1.5 Mg at FPC TX, then FPC TX will retain a third-party contractor during the following quarter to undertake a TAB study and compliance review. By no later than 90 days after FPC TX receives the results of the third party TAB study, FPC TX will submit such results, along with a plan and schedule for remedying any deficiencies identified, to EPA. FPC TX will implement the plan unless and until EPA disapproves.

12. Miscellaneous Inspections and Monitoring.

By no later than six (6) months after the Date of Lodging of this Decree by FPC TX, FPC TX shall:

- a. Conduct monthly visual inspections of and, if appropriate, refill all Subpart FF water traps within the FPC TX's Subpart FF affected individual drain systems;
- b. If FPC TX utilizes conservation vents, visually inspect all Subpart FF conservation vents or indicators on Subpart FF affected individual drain systems (i.e., process sewers) for detectable leaks on a weekly basis, reset any vents where leaks are detected, and record the results of the

inspections. After six (6) months of weekly inspections, and based upon an evaluation of the recorded results, FPC TX may submit a request to EPA Region 6 to modify the frequency of the inspections. EPA shall not unreasonably withhold its consent to such modification. Alternatively, for conservation vents with indicators that identify whether flow has occurred, FPC TX may elect to visually inspect such indicators on a monthly basis and, if flow is then detected, FPC TX shall then visually inspect that indicator on a weekly basis for four (4) weeks. If flow is detected during normal operation any two of those four (4) weeks, FPC TX shall install a carbon canister or other environmentally equivalent controls on that vent until appropriate corrective action(s) can be implemented to prevent such flow. Nothing in this Subparagraph shall require FPC TX to monitor conservation vents on fixed roof tanks; and

c. Conduct quarterly monitoring and repair of the oil-water separators in benzene waste service consistent with the "no detectable emissions" provision in 40 C.F.R. § 61.347 or quarterly measurements of the oil-water separator secondary seal gap if using the alternative control requirements allowed under 40 C.F.R. § 61.352, if the separator is a control device under Subpart FF.

13. Recordkeeping and Reporting Requirements

- a. As part of the Annual Reports required by Section VI or as otherwise required under this Subsection, FPC TX shall submit, as and to the extent required, the following information to EPA:
- (1) BWON Compliance Review and Verification Report (under Subparagraph 3.a.), as amended, if necessary;
 - (2) Amended TAB Report, if necessary (under Subparagraph 4.a.);
 - (3) BWON Corrective Measures Plan, if necessary (under Subparagraph 4.b.);
- (4) Certifications of Compliance, if necessary (under Subparagraph 4.c.) (Actions Necessary to Correct Non-Compliance, Certification of Compliance);
- (5) notification, if necessary, that FPC TX has completed the installation of primary and secondary carbon canisters at locations using single canisters prior to the Date of Lodging, and is operating the primary and secondary carbon canisters in series (under Subparagraph 5.a. (Carbon Canisters));
 - (6) Initial and subsequent Laboratory Audit Reports (under Paragraph 7);
- (7) a description of the measures taken, if any, during the preceding twelve (12) month period to comply with the training provisions of Paragraph 9;
- (8) BWON Sampling Plan, and revised BWON Sampling Plan, if necessary (under Subparagraph 10.a.); and,
 - (9) a summary of the sampling results required under Subparagraph 10.a.
- b. FPC TX shall retain records containing the following information during the time period that the Consent Decree remains in effect:
 - (1) monthly visual individual drain inspection results;

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- (2) conservation vent monitoring results and installation of alternative control equipment; and
 - (3) oil/water separator monitoring results.

APPENDIX C--VINYL CHLORIDE NESHAP

Leak Detection and Elimination Program

1. In addition to continuing to comply with all applicable requirements of 40 C.F.R. Part 61, Subpart F ("National Emission Standard for Vinyl Chloride"), Defendants agree to undertake the measures set forth in this Subsection to ensure continuing compliance with 40 C.F.R. § 61.65(b)(8) and to minimize fugitive vinyl chloride monomer ("VCM") emissions regulated under Subpart F's Leak Detection and Elimination ("LDE") Program in the applicable Covered Process Units, as defined in Appendix A.

Ambient Monitoring System

2. Defendants will submit its current LDE Plans to EPA by no later three (3) months after the Date of Lodging of this Decree, and will re-submit the plans for review as updates occur throughout the term of this Consent Decree.

Ambient Monitoring System Leak Definition

3. By no later than the Date of Entry, Defendants will set their ambient air monitoring systems to alarm at 5 ppm VCM on a one-monitoring cycle basis. When the system goes into alarm at 5 ppm VCM or greater, a field walk-through to determine if a leak, as defined in the LDE plan, is present will be conducted.

Trend Analysis

- 4. Quarterly, for the term of the Consent Decree, Defendants will evaluate the ambient monitoring data to identify plant areas with the greatest alarms (frequency and/or magnitude) by no later than three (3) months after the Date of Lodging of this Decree. After collecting 4 quarters of data, Defendants will develop a work plan to use the information to improve the location of monitors, number of monitoring points, number of fixed-point ambient air monitors and response to alarms, if necessary.
- 5. A summary of the results of the quarterly trend analysis will be included in the Annual Report.
- 6. If Defendants deem it necessary to modify any portion of the ambient monitoring system as a result of the trend analysis, Defendants shall update and re-submit the Leak Detection and Elimination Plan for approval to the appropriate state agency if the modification impacts the Plan.

LDE Audits

7. By no later than six (6) months after the Date of Lodging of this Decree, Defendants will perform an initial internal audit at each Covered Facility, as defined in Appendix A, that will include, but will not be limited to: (a) reviewing records to ensure that date, time, location and concentration of each confirmed leak is documented; (b) reviewing records to ensure that corrective actions are documented and implemented; (c) reviewing records to ensure that a field walk-through

investigation was conducted and documented for each alarm event greater than 5 ppm; (d) reviewing calculations of vinyl chloride emissions from confirmed leaks causing alarms to ensure that all appropriate reporting was completed (i.e., EPCRA, CERCLA, State and Local) for releases that exceeded the reportable quantity for vinyl chloride monomer (VCM); and, (e) reviewing emissions inventory and TRI reporting practices to ensure that confirmed sources of alarms and releases are included and accounted for in each Covered Facility's emission reports.

- 8. After the initial audit, Defendants will conduct an additional LDE audit prior to termination of the Consent Decree.
- 9. LDE Audit Reports will be submitted in the next Annual Report due under this Consent Decree.

Enhanced recordkeeping and reporting:

- 10. By Date of Entry, and until termination of this Consent Decree, Defendants will record:
 - a. The number of ambient monitoring system alarms greater than 5 ppm VCM;
- b. The type of equipment and/or activity involved in alarms for confirmed leaks greater than 5 ppm VCM;
 - c. The location of each VCM alarm;
 - d. The date and approximate time of each VCM alarm;
 - e. Any corrective actions taken; and
 - f. System downtime for each ambient air monitor.
- 11. By Date of Entry, and until termination of this Consent Decree, FPC TX (within its quarterly Ambient Monitoring Report required by the State) and FPC LA (within its quarterly VCM NESHAP Report) will report upon:
- a. The number of ambient monitoring system alarms at a level greater than 5 ppm VCM;
- b. The type of equipment and/or activity involved in alarms for confirmed leaks greater than 5 ppm VCM;
 - c. The concentration of the alarm event;
 - d. Any corrective action taken in response to these alarms; and
 - e. System downtime for each ambient air monitor.

APPENDIX D—RESOURCE CONSERVATION AND RECOVERY ACT

- A. Management of Waste From Cleaning of Unit NE-107 A/B (the "Tar Still") Within the Baton Rouge, Louisiana VCM Unit:
 - No later than three (3) months from the Date of Lodging of this Decree, FPC LA shall
 cease discharging the ethylene dichloride ("EDC") rinse that is used to clean the Tar
 Still to the organic water separator tank (Tank NT-502) or any other part of the FPC LA
 facility's wastewater system.
 - 2. No later than three (3) months from the Date of Lodging of this Decree, FPC LA shall include the hazardous waste codes of K019 and K020 on all waste manifests for all waste materials removed from the Tar Still during the Tar Still cleaning process and shall send such waste materials off-site for disposal.

B. FPC TX:

- 1. FPC TX shall undertake the following sampling to make a hazardous waste determination of the water that is discharged from the wastewater CPI into the process cooling towers.
 - a. Within six (6) months from the date of the lodging of this Consent Decree, FPC TX shall make an initial hazardous determination of the water that is discharged from the wastewater CPI into the process cooling towers. This initial hazardous waste determination shall be made by using the results from a minimum of four (4) samples.
 - b. Beginning six (6) months from the date of the lodging of this Consent Decree, FPC TX shall continue to collect one sample per calendar quarter to analyze for the toxicity characteristic of hazardous waste.
 - c. At a minimum, the samples shall be analyzed for benzene. The results from samples analyzed by the EPA methods SW 846 Method 8240 or SW 846 Method 8260 may be used in lieu of the TCLP methods required by 40 C.F.R. § 261.24(a).
 - d. FPC TX shall immediately cease all water discharges from the CPI into the process cooling water system if any of the sample results determines that the water displays any of the hazardous waste characteristics of toxicity listed in 40 C.F.R. § 261.24(b) Table 1, and shall manage that water consistent with such toxicity characteristic.
 - e. FPC TX shall provide notification to EPA within seven (7) days of receiving sample results for any sample where the analysis determines that the water from the CPI displays a characteristic of toxicity listed in 40 C.F.R. § 261.24(b) Table 1.
 - f. FPC TX shall report all sampling results in the Annual Report that is required under this Consent Decree.
- 2. Immediately upon the lodging of this Consent Decree, FPC TX shall manage all wastewater sludge generated at and downstream from Unit TZT-07 under the hazardous waste codes U077, K019, and K020.

3. Immediately upon the lodging of this Consent Decree, FPC shall comply with the hazardous waste storage requirements of 40 C.F.R. § 262.34.

APPENDIX E--CLEAN WATER ACT

- 1. <u>Incident Investigation and Corrective Action</u>. Within twenty-four (24) hours after discovering an exceedance of an applicable NPDES permit limit ("permit exceedance"), Defendants shall commence a root cause investigation to determine the cause of the permit exceedance. Within forty-five (45) days after discovery of the permit exceedance, Defendants shall complete the root cause investigation and take any corrective action necessary to prevent a recurrence of the permit exceedance. To the maximum extent possible, corrective action shall be completed within forty-five (45) days after the discovery of the permit exceedance. The results of the root cause investigation shall be documented in a written report that includes, but is not limited to, an identification of any corrective action taken or to be taken and the schedule for completing such corrective action if it cannot be completed within forty-five (45) days after discovery of the permit exceedance.
- 2. <u>Channel Marker 22 of Upper Lavaca Bay.</u> FPC TX shall continue to implement the Standard Operating Procedure approved by the Texas Commission on Environmental Quality ("TCEQ") by correspondence dated June 12, 2008, for the measurement of water depth in the vicinity of Channel Marker 22 of Upper Lavaca Bay under the terms of the FPC TX NPDES Permit.

APPENDIX F--EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

- 1. Within 90 days of the Date of Lodging, FPC TX shall complete a comprehensive internal review of its training procedures to ensure that all personnel involved in carrying out FPC TX's responsibilities to report releases are adequately trained to ensure compliance with EPCRA Section 313, CERCLA Section 103, and EPCRA Section 304. FPC TX shall identify any deficiencies discovered during this review, and any deficiencies noted in this review shall be corrected and the training procedures updated within 120 days of the Effective Date of the Consent Decree.
- 2. Within nine (9) months of the Date of Lodging, FPC TX shall conduct a comprehensive review of previously submitted Form Rs (Reporting Years 2003 2007) to determine if the releases to air, land, and water, and all waste management activities were accurately calculated, i.e., data quality checks. In the event a submitted Form R was inaccurate:
 - a. No later than nine (9) months after the Date of Lodging, FPC TX shall submit the appropriate new or revised Toxic Release Inventory ("TRI") reporting form to the EPCRA 313 Reporting Center, and to the State of Texas (Texas Commission on Environmental Quality).
 - b. As part of the first Annual Report required under this Decree, FPC TX shall submit a written report to EPA summarizing the findings from this evaluation and detailing the FPC TX's corrective actions.
- 3. No later than 180 days before FPC TX's next TRI Annual Report is due, FPC TX shall institute an internal program evaluation to determine:
- a. The types and quantities of chemicals manufactured, processed, or otherwise used, on-site. This evaluation shall include a Material Safety Data Sheet ("MSDS") review. The MSDS review shall determine if any TRI chemicals are used onsite in quantities greater than the reporting thresholds, and if releases of these chemicals have gone unreported. For any TRI chemicals identified as having been or being used over the reporting thresholds where no reporting has been completed, FPC TX shall submit the appropriate TRI forms within ninety (90) days of identification.
- b. FPC TX shall also standardize calculation methods, where appropriate, to ensure accurate and timely reporting. Each May 31 following the Date of Lodging, the FPC TX reporting officials shall meet to review the chemicals reported, types and quantities of releases reported, and calculation methods used. Discrepancies in this comparison shall be investigated and inaccuracies shall be corrected prior to filing the TRI reporting forms in July.
 - c. The internal program review shall also determine:
- (i) The extent to which the presence of any chemicals identified in Paragraph 3.a and b. above trigger reporting obligations under EPCRA or other federal statutes;
- (ii) Whether FPC TX's procedures for detecting reportable releases under CERCLA Section 103 and EPCRA Section 304 are adequate to ensure timely and accurate reporting; and
 - (iii) Whether FPC TX's procedures for calculating thresholds and emissions for

Case 6:09-cv-00061 Document 9-1 Filed in TXSD on 02/03/10 Page 34 of 35

Appendices to Consent Decree in U.S. v. Formosa Plastics Corporation, Texas, et al.

purposes of EPCRA Section 313 are adequate to ensure accurate and timely reporting.

CERTIFICATE OF SERVICE

I hereby certify that on February 1, 2010, I caused a copy of the foregoing Unopposed Motion of the United States of America to Enter the Consent Decree Between the United States and Defendants, as well as the accompanying Memorandum in Support, to be served via first class mail, postage prepaid, on the following attorney for Defendants:

Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400 Facsimile: (512) 495-6617 Bob.Stewart@khh.com

/s/ Scott M. Cernich
Scott M. Cernich

A1/41/co



437403

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

Fax: 361-987-2363

November 21, 2008

RECEIVE

NOV 2 5 2008

Air/Texics & Inspection Coordination Branch 6EN-A

Certified Mail: 7007 1490 0004 3442 0885

Ms. Jennifer Gibbs
Toxics Enforcement Section (6EN-AT)
Compliance Assurance and Enforcement Division
US EPA - Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re:

Clean Air Act Section 114 Information Request

Formosa Plastics Corporation, Point Comfort Facility

Dear Ms. Gibbs:

Enclosed is the remaining response (relating to flaring) to the Clean Air Act Section 114 Information Request, received October 8, 2008. This submission is a consolidated response from all the Formosa Plastics Corporation, Point Comfort facilities.

The response is complete to the best of our knowledge and belief for the questions regarding flaring. All supporting records that were necessary to address each question are also included. The CFC and Leak Detection and Repair information was previously submitted on November 7, 2008.

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the CAA, and 18 USC §§ 1001 and 1341.



If you have any questions, please contact Mr. David Hill by email at DavidHill@ftpc.fpcusa.com or by telephone at (361)987-7442.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

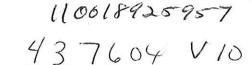
Enclosure

Formosa Plastics Corporation Point Comfort Facility

Clean Air Act Section 114 Information Request

Response for Flaring (Questions 1 through 10)

MAU CO





Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

Fax: 361-987-2363

October 28, 2008

RECEIVE

OCT 3 1 2008

Air/Toxics & Inspection Coordination Branch 6EN-A

Certified Mail: 7007 1490 0004 3442 0847

Ms. Jennifer Gibbs
Toxics Enforcement Section (6EN-AT)
Compliance Assurance and Enforcement Division
US EPA - Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re:

EDC Cracking, VCM, and PVC Processing Facility Approved Leak Detection and Elimination Program

Dear Ms. Gibbs:

In a meeting that occurred in Dallas, Texas on October 21, 2008, you had requested a copy of the current approved Leak Detection and Elimination (LDE) program for the Formosa Plastics Corporation-Texas (FPC-TX) VCM and PVC units.

On December 20, 2007, FPC-TX received approval for the VCM unit's program. After completing a request for an updated location table and magnified maps from the PVC unit, FPC-TX received approval on February 20, 2008, for their program. This was followed by a clarification letter on April 10, 2008, which defined the additional reporting requirements.

The above documents are provided on the enclosed disc for your review. If you have any questions, please contact Stephanie Schmidt at StephanieSchmidt@ftpc.fpcusa.com or by telephone at (361)987-8073.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas NO DISK LOCATED IN RECORD VOLUME 437604

Enclosure









April 5, 2012

Formosa Plastics Corporation, America

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000

Fax: (361) 987-2363

RECEIVE

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200

APR - 9 2012

Air/Toxics & Inspection Coordination Branch 6EN-A

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Certified Mail: 7011 0110 0000 1782 5147

Dear Madam and Sirs:

Dallas, TX 75202

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On March 23, 2012, FPC TX discovered that 46 Valves, 115 Connectors, 1 PRV, and 2 Pumps had not been added to the LDAR program within one year of the Date of Lodging. During the Third-Party LDAR Audit required under Appendix A, Section J, Paragraph 26 of the subject Consent Decree, these components were identified as being in VOC service but were not in the LDAR Program. These missed components will be included in the Audit report that will be submitted at a later date.

On March 26, 2012, FPC TX discovered that 18 Valves and 44 Connectors had not been added to the LDAR program within one year of the Date of Lodging. While conducting routine inventory maintenance activities, it was discovered that this VOC equipment was not in the LDAR program.

Corrective Actions Taken:

Upon discovery, the covered equipment was added to the LDAR system and monitored as required per Method 21.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas



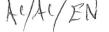


cc: Certified Mail: 7011 0110 0000 1782 5154
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7011 0110 0000 1782 5161 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7011 0110 0000 1782 5178 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

FAX: (512) 495-6401







April 20, 2012

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700

Point Comfort, TX 77978 Telephone: 361-987-7000

Fax: 361-987-2721 RECEIVE

U.S. Environmental Protection Agency, Region 6 Associate Director Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division 1445 Ross Ave., Ste. 1200 Dallas, TX 75202 Via CMRRR APR 24 2012

> Air/Toxics & Inspection Coordination Branch 6EN-A

U.S. Environmental Protection Agency Director, Special Litigation and Projects Division Office of Civil Enforcement Office of Enforcement and Compliance Assurance 1200 Pennsylvania Ave., NW (MC 2248-A) Washington, DC 20460 Via CMRRR

U.S. Department of Justice Chief, Environmental Enforcement Section Environment and Natural Resources Division Box 7611 Ben Franklin Station Washington, DC 20044 Via CMRRR

John Blevins
Director, Compliance Assurance and Enforcement Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Ave., Ste. 1200
Dallas, TX 75202

Via CMRRR

Re: United States v. Formosa Plastics Corporation, Texas, et al. Civil Action No. 6:09-cv-00061

Notice of Dispute

Dear Sir or Madam:

Pursuant to paragraph 48 of the Consent Decree entered in the above-reference matter, this Notice of Dispute is submitted on behalf of Formosa Plastics Corporation, Texas, and Formosa Hydrocarbons Company, Inc. Formosa disputes the allegations and demand for stipulated penalties made in Mr. Blevins' March 23, 2012 letter to Formosa.

Most of EPA's demand relates to 8001 components at Formosa Hydrocarbons which are in natural gas service that were not originally included in the LDAR program. Pursuant to the NSPS Subpart KKK, components at a natural gas processing plant are not subject to the LDAR requirements if the VOC content of the natural gas "can be reasonably expected never to exceed 10.0% by weight." 40 C.F.R. § 60.632(f). This was certainly Formosa's reasonable expectation. The reasonableness of this expectation is supported by a document from EPA headquarters,





EPA-HQ-OAR-2010-0505-0084, which is a July 28, 2011 memorandum from an EPA contractor (copy enclosed). This document indicates that natural gas would not be expected to exceed VOC content of 10% by weight.

Formosa discovered during testing for greenhouse gas purposes pursuant to 40 CFR Part 98 Subpart W(natural gas is mostly methane and ethane which are not VOC's; methane is a greenhouse gas) that of the five inlet streams that were tested, the VOC content of three was slightly over the 10% by weight VOC content. Importantly, Formosa immediately placed all 8001 components into the LDAR program. Until it tested, Formosa had a reasonable expectation that the natural gas would never exceed 10% VOC content by weight. After testing, Formosa immediately put these components into the LDAR program. Thus, there is no violation. Because Formosa reasonably expected the natural gas would never exceed 10% by weight VOC content, these 8001 components were not required to be in the LDAR program before the testing. Formosa sent EPA a notice of non-compliance in the cooperative spirit of reporting facts and reserving legal arguments and interpretation for later, not because it believed it had violated the decree and because the decree requires reporting within ten days.

Another 190 components from other units in the plant were also not initially included in the LDAR program. The Formosa facility has hundreds of thousands of valves, flanges, pumps and agitators. There were various circumstances surrounding Formosa's initially missing these 190 components, such as components in locations that are rarely observed, components that are commonly believed to be not in VOC service, or in some cases components thought to be out of service. Importantly, Formosa discovered these components on its own and promptly added them to the LDAR program.

With respect to the allegations in EPA's letter regarding failure to implement internal leak definitions for 145 components at Formosa Hydrocarbons, the Consent Decree provides for a longer period of time for components in the Formosa Hydrocarbon plant to be placed in the LDAR program than it does for components in other units. Appendix A to the Consent Decree, Subsection C.4.a. specifically allows 24 months, which is longer than the 6 month and 18 month periods for other components. The basis for this longer period of time is that going from the regulatory definition of a leak of 10,000 parts per million to defining a leak as 250 parts per million is unprecedented at a natural gas processing plant. In order to avoid being overwhelmed, the 24 month period was provided so that Formosa could step down the leak definition from 10,000 ppm to 500 ppm to 250 ppm. Because the Consent Decree allows 24 months and the 145 connectors were monitored at the 250 ppm definition within the 24 months, there is no violation. Formosa filed a notice of noncompliance because it was concerned that EPA might interpret the parenthetical in the Consent Decree, Appendix A, Subsection C.4.a to apply only to valves and not to connectors. However, there is no reasonable basis to limit the parenthetical to only valves when the unprecedented reduction at Formosa's natural gas processing plant in the definition of leak from 10,000 ppm to 250 ppm was to be applied to both the valves and connectors.

Now that Formosa has initiated the dispute resolution provisions of the Consent Decree and because it has in no way violated the decree, it looks forward to informally resolving this dispute with EPA as provided in Paragraph 48 of the Consent Decree.

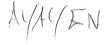
Sincerely,

Randall P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas

cc: J. Stephen Ravel, Kelly Hart & Hallman, LLP Robert T. Stewart, Kelly Hart & Hallman, LLP



110018925957 THIT V5



Formosa Plastics Corporation, America

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: (361) 987-780 **RECEIVE**Fax: (361) 987-2363

February 14, 2012

FEB 1 6 2012

Air/Toxics & Inspection Coordination Branch 6EN-A

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Certified Mail: 7008 1830 0000 9417 1908

Dear Madam and Sirs:

Dallas, TX 75202

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On January 31, 2012, FPC TX discovered that 35 Valves and 106 Connectors had not been added to the LDAR program within one year of the Date of Lodging. While conducting routine inventory maintenance activities, it was discovered that this VOC equipment was not in the LDAR program. The equipment had been included in the required AVO inspections, and there was no indication of any leaks.

Corrective Actions Taken:

Upon discovery, the covered equipment was added to the LDAR system and monitored as required per Method 21 with no leaks found.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas





cc: Certified Mail: 7008 1830 0000 9417 1915
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 1922 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 1939 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

FAX: (512) 495-6401

AC/AC/EN



Formosa Plastics Corporation, America

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: (361) 987-7000 Fax: (361) 987-2363

RECEIVE

JAN 9 000

Air/Toxics & Inspection Coordination Breach

January 5, 2012

Certified Mail: 7008 1830 000 9417 1441

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On December 19, 2011, FPC TX discovered that 9 Valves and 29 Connectors had not been added to the LDAR program within one year of the Date of Lodging. While conducting routine inventory maintenance activities, it was discovered that this VOC equipment was not in the LDAR program. The affected equipment was not identified by the operating department as being in VOC service when the LDAR tagging was previously completed.

Corrective Actions Taken:

Upon discovery, the covered equipment was added to the LDAR system and monitored as required per Method 21.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas

cc: Certified Mail: 7008 1830 0000 9417 1458

Director, Special Litigation and Projects Division

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

1200 Pennsylvania Avenue, NW (MC 2248-A)

Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 1465 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 1885 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000

Austin, Texas 78701

Telephone: (512) 495-6400

FAX: (512) 495-6401



Formosa Plastics Corporation, America

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: (361) 987-7000 Fax: (361) 987-2363

Certified Mail: 7008 1830 0000 9417 2387

Certified Mail: 7008 1830 0000 9417 2394

January 31, 2012

EPA Region 6 Associate Director, Air Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

EPA Headquarters Director, Special Litigation and Projects Division Office of Civil Enforcement Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW (MC 2248-A) Washington, DC 20460

> Re: Submittal of Annual Reports Required by Consent Decree Entered on February 3, 2010; Formosa Plastics Corporation, Texas, Formosa Hydrocarbons, Inc., and Formosa Plastics Corporation, Louisiana (Formosa); Civil Action No. 6:09-cv-00061

Dear Madam or Sir:

In accordance with Section VI, Paragraph 23 and Appendix A, Subsection M, Paragraphs 34 and 35 of the above-referenced consent decree; Formosa is submitting its Annual Report (for the Period of 07/01/2010 - 06/30/2011) and its Leak Detection and Repair (LDAR) Annual Compliance Status Report (for the Period of 01/01/2011 -12/31/2011). The reports cover Formosa Plastics Corporation, Texas (FPC TX), Formosa Hydrocarbons, Inc. (FHC) and Formosa Plastics Corporation, Louisiana (FPC LA). The referenced consent decree was lodged on 9/29/2009 and was entered on 2/3/2010.

This submittal consists of individual reports for FPC TX, which includes FHC, and FPC LA. Under the terms of the decree, reports are due to EPA by January 31 of the following year.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the

PROCESSED BY REGION ON





information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Should you have any questions regarding these reports, please contact Grace Chang by email at gchang2@fpcusa.com or by phone at (973)716-7341 or Mary Bachynsky by email at mbachynsky@fpcusa.com or phone at (973) 716-7342.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Attachments

Certification Statement for Formosa Plastics Corporation Texas (FPC TX) and Formosa Hydrocarbons Company, Inc (FHC).

I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify that "LDAR trainings in accordance with this Consent Decree have been done" in FPC TX and FHC per Appendix A, Subsection H, Paragraph 22.

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Certification Statement for Formosa Plastics Corporation, Louisiana (FPC LA)

I, Kelly Serio, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify that "LDAR trainings in accordance with this Consent Decree have been done" in FPC LA per Appendix A, Subsection H, Paragraph 22.

Kelly Seriø

Vice President/General Manager Formosa Plastics Corp., Louisiana

List of Attachments for CD/LDAR Annual Report FPC TX

- Attachment I Table of Non-Compliances with the Consent Decree (Reference: Consent Decree Paragraph 23b and Appendix A, Subsection M, Paragraph 34a)
- Attachment II "Valve Technology Survey" Commercial Unavailability of a
 Certified Low-Leaking Valve or Certified Low-Leaking Valve
 Packing Technology
 (Reference: Appendix A, Subsection G, Paragraph 20 and
 Appendix A, Subsection M, Paragraph 34c)
- Attachment III Identification of any Problems Encountered in Complying with the Requirements of Appendix A (Reference: Appendix A, Subsection M, Paragraph 34a)
- Attachment IV List of Deviations Identified in the QA/QC Performed Under Appendix A, Subsection I
 (Reference: Appendix A, Subsection M, Paragraph 34e)
- Attachment V Status of Corrective Action Taken During the Reporting Period from 1/1/2011 12/31/2011

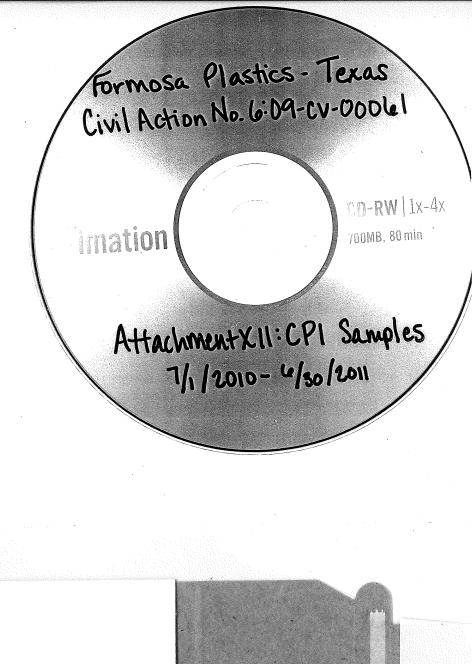
 (Reference: Appendix A, Subsection M, Paragraph 34g)
- **Attachment VI –** List of Locations Where Carbon Canister Systems are Used as Control Devices under Subpart FF (Reference: Appendix B, Paragraph 5a)
- **Attachment VII –** Quarterly Uncontrolled Benzene Quantity and Projected Uncontrolled Benzene Quantity for Reporting Period from 7/1/2010 6/30/2011 (Reference: Appendix B, Paragraph 10a(3))
- Attachment VIII BWON Sampling Plan
 (Reference Appendix B, Paragraph 13a(8)) Incorporated by Reference
- **Attachment IX–** Measures Taken to Comply with Training Provisions of Appendix B, Paragraph 9 (Reference: Appendix B, Paragraph 13a(7))

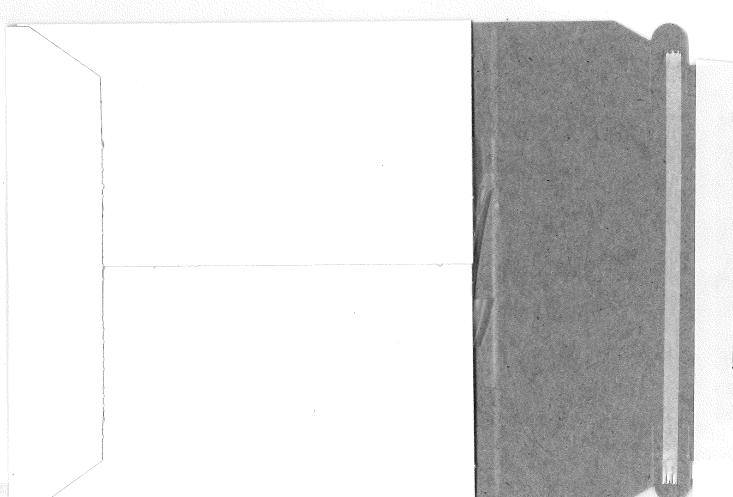
List of Attachments for CD/LDAR Annual Report FPC TX

Attachment X – Summary of BWON Sampling Results Required Under Subparagraph 10a (Reference: Appendix B, Paragraph 13a(9))

Attachment XI – Summary of Results from the LDE Quarterly Trend Analysis (Reference: Appendix C, Paragraph 5)

Attachment XII – CPI Sampling Results (Reference: Appendix D, Paragraph 1f)





AT/AT/EN 110018925957



Formosa Plastics Corporation, America 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000 Fax: (361) 987-2363

June 12, 2012

Certified Mail: 7011 0110 0000 1782 6632

JUN 1 4 2012

Ms. Jennifer Gibbs U. S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 (MC-6EN) Dallas, TX 75202-2733

Air/Toxics & Inspection Coordination Branch 6EN-A

Formosa Plastics Corporation, Texas RE:

Requested Copy of Leak Detection and Repair (LDAR) Database

Dear Ms. Gibbs:

In a meeting held on May 24, 2012, you requested a backup copy of our LDAR database for your review. A DVD is attached with the requested backup of our GuideWare database containing the LDAR monitoring records for the Consent Decree Covered Process Units located at Formosa Plastics Corporation, Texas. This backup copy was created on June 4, 2012, and was current as of that date.

Should you have any questions please contact Sean Woodard at (361) 987-7463 or by e-mail at seanwoodard@ftpc.fpcusa.com.

Sincerely,

R. P. Smith Vice President/General Manager





Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000



April 15, 2013

Certified Mail: 7011-0110-0000-1782-6946

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject: Consent D

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of noncompliance with Appendix D, Provision B.1.b. of the Decree. Each calendar quarter a sample of the CPI effluent make-up water is tested for the toxicity characteristic of hazardous waste at each Olefins Plant. The Olefins I plant failed to analyze the CPI effluent water going to the cooling tower as make-up water in the first calendar quarter of 2013. When the plant found the deficiency the plant immediately sampled the CPI effluent make-up water the day following the calendar quarter (4/1/13). The 4/1/13 CPI effluent analysis is attached. Although this did not prevent the noncompliance situation, the late sample will provide process knowledge.

Additionally, the plant has other process knowledge data to confirm the non-presence of Benzene in characteristic levels. The plant conducts continuous monitoring (GC) of the makeup water going to the cooling tower. The GC analysis (Method 18) for the quarter is attached indicating no levels of Benzene were present. The plant also utilizes a PAAI water sparger prior to analysis utilizing Method 18. Lastly, grab samples are taken 4 times a days and analyzed utilizing Method 5021 A to confirm that the CPI effluent makeup water going to the cooling tower did not have a VOC upset.





Cause of Violation:

Failure to put out orders for the shift supervisors to bring a non-routine grab sample of the CPI effluent cooling tower makeup water to the lab. A sample was caught as soon as the omission was noted.

Remedial Actions Taken to Prevent Reoccurrence:

The Olefins I plant will sample the CPI effluent to cooling tower on a more frequent basis to avoid re-occurrence.

As with any non-conformance disciplinary actions are under evaluation for the personnel involved, and such actions will follow the site's standard progression for disciplinary matters.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas

Attachments

cc: Certified Mail: 7011-0110-0000-1782-6953
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7011-0110-0000-1782-6960 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7011-0110-0000-1782-6977 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400



Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-987-7000

August 8, 2013

Certified Mail: 7011 0110 0000 1782 7141

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of noncompliances with Appendix D, Provision B.3 of the Decree. A hazardous waste drum was stored for two hours without an accumulation date in a designated 90 day storage area. The situation was immediately corrected and the cause was determined.

Cause of Violation:

Failure to implement the existing written procedure is the likely cause of the non-compliance. The hazardous waste drum remained in the 90 day storage area without an accumulation date for two hours. The accumulation date was entered the same day the problem was discovered.





Remedial Actions Taken to Prevent Reoccurrence:

Disciplinary actions are under evaluation for the personnel involved, and such actions will follow the site's standard progression for disciplinary matters.

Should you have any questions, please contact Mr. David Hill by email at davidhill@ftpc.fpcusa.com or by phone at (361) 987-7442.

Sincerely,

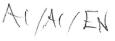
Randy Smith

VP/General Manager

cc: Certified Mail: 7011 0110 0000 1782 6823
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7011 0110 0000 1782 6830 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7011 0110 0000 1782 6847 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400





December 6, 2013

Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-987-7000

RECEIVE

Certified Mail: 7012 3460 0001 7691 0144

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

-6 2013

Air/Toxics & Inspection Coordination Branch 6EN-A

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Paragraph 39 Report for Formosa Hydrocarbons Plant

Dear Madam and Sirs:

In accordance with Paragraph 39 of Appendix A of the First Amendment of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby submitting the Paragraph 39 Report for the Formosa Hydrocarbons (FHC) Plant. The Covered Process Unit Evaluation was completed in the FHC Plant on November 23, 2013.

Over the course of the Evaluation, 96 Valves, 324 Connectors, and 2 Pressure Relief Valves were identified as being in VOC or HAP service but were not included in the LDAR Program. The components were added to the LDAR system and will be monitored as required.

Over the course of the Evaluation, 8 Valves and 13 Connectors were identified as not being in VOC or HAP service, but were included in the LDAR Program. The components were removed from the LDAR system.

I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

R. P. Smith

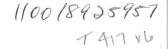
VP/General Manager

cc: Certified Mail: 7012 3460 0001 7691 0151
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7012 3460 0001 7691 0168 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7012 3460 0001 7691 0175 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

AU/AI/EN





Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-98

February 20, 2013

FIB 22 2013

Arr/Toxics & Inspection Coordination Branch 6EN-A

Certified Mail: 7011 0110 0000 1782 9282

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Sir:

Appendix B, Paragraph 10.a (5) of the Consent Decree lodged in Civil Action 6:09-cv-00061 requires Formosa to submit to EPA an updated Benzene Waste Operations NESHAP Sampling Plan for FPC TX when there are changes in processes, operations, or other factors that lead FPC TX to conclude that the Sampling Plan may no longer provide an accurate basis for estimating FPC TX's quarterly benzene quantity. Although there have been no changes that would cause the Sampling Plan to be providing an inaccurate basis for estimating FPC TX's quarterly benzene quantity, FPC TX is submitting an update to the Sampling Plan, which reflects changes made after a periodic review, for the sake of good order.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Enclosure





Cc: Certified Mail: 7011 0110 0000 1782 9688
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, D.C. 20460

Certified Mail: 7011 0110 0000 1782 9695 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, TX 78701



Benzene Waste Operation NESHAP

Consent Decree BWON Sampling Plan

Formosa Plastics Corporation, Texas (FPC TX)



March 29, 2010 (Original) February 20, 2013 (Rev. 1)



Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700

Point Comfort, TX 77978 Telephone: 361-987-7000



January 15, 2013

Certified Mail: 7011 0110 0000 1782 9848

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of noncompliances with Appendix D, Provision B.3 of the Decree. A hazardous waste drum was stored for greater than 3 days beyond the accumulation date in a designated Satellite Area. The situation was immediately corrected and the cause was determined.

Cause of Violation:

Failure to implement the existing written procedure is the likely cause of the non-compliance. The hazardous waste drum remained in the satellite area beyond the 3-day limit. The drum was removed from the satellite storage area the same day the problem was discovered.

Remedial Actions Taken to Prevent Reoccurrence:

The drum was immediately removed from the satellite storage area and taken to the designated Container Storage Area the day the problem was discovered. Disciplinary actions are under evaluation for the personnel involved, and such actions will follow the site's standard progression for disciplinary matters.





Sincerely,

Randy Smith
VP/General Manager
Formosa Plastics Corporation, Texas

cc: Certified Mail: 7011 0110 0000 1783 3166
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7011 0110 0000 1783 3173 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7011 0110 0000 1783 3180 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400





Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-987-7000

January 31, 2013

RECEIVE

EPA Region 6

Certified Mail: 7011 0110 0000 1782 9664 2013

Associate Director, Air Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200

Arr/Toxics & Inspection Coordination Branch

6EN-A

Dallas, TX 75202

EPA Headquarters

Certified Mail: 7011 0110 0000 1782 9671

Director, Special Litigation and Projects Division Office of Civil Enforcement Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW (MC 2248-A) Washington, DC 20460

Submittal of Annual Reports Required by Consent Decree Entered on February 3, 2010; Formosa Plastics Corporation, Texas, Formosa Hydrocarbons, Inc., and Formosa Plastics Corporation, Louisiana (Formosa); Civil Action No. 6:09-cv-00061

Dear Madam or Sir:

In accordance with Section VI, Paragraph 23 and Appendix A, Subsection M, Paragraphs 34 and 35 of the above-referenced consent decree; Formosa is submitting its Annual Report (for the Period of 07/01/2011 - 06/30/2012) and its Leak Detection and Repair (LDAR) Annual Compliance Status Report (for the Period of 01/01/2012 -12/31/2012). The reports cover Formosa Plastics Corporation, Texas (FPC TX), Formosa Hydrocarbons, Inc. (FHC) and Formosa Plastics Corporation, Louisiana (FPC LA). The referenced consent decree was lodged on 9/29/2009 and was entered on 2/3/2010.

This submittal consists of individual reports for FPC TX, which includes FHC, and FPC LA. Under the terms of the decree, reports are due to EPA by January 31 of the following year.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the



information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Should you have any questions regarding these reports, please contact Grace Chang by email at gchang2@fpcusa.com or by phone at (973)716-7341 or Mary Bachynsky by email at mbachynsky@fpcusa.com or phone at (973) 716-7342.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Attachments

Certification Statement for Formosa Plastics Corporation Texas (FPC TX) and Formosa Hydrocarbons Company, Inc (FHC).

I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify that "LDAR trainings in accordance with this Consent Decree have been done" in FPC TX and FHC per Appendix A, Subsection H, Paragraph 22.

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

List of Attachments for CD/LDAR Annual Report FPC TX

- Attachment I Table of Non-Compliances with the Consent Decree (Reference: Consent Decree Paragraph 23b and Appendix A, Subsection M, Paragraph 34a)
- Attachment II Findings and Corrective Actions for LDAR Audit, Including Updates to Any Corrective Actions that are Necessary (Reference: Appendix A, Subsection L, Paragraph 33 and Subsection M, Paragraph 34f)
- Attachment III "Valve Technology Survey" Commercial Unavailability of a
 Certified Low-Leaking Valve or Certified Low-Leaking Valve
 Packing Technology
 (Reference: Appendix A, Subsection G, Paragraph 20)
- **Attachment IV** Identification of any Problems Encountered in Complying with the Requirements of Appendix A (Reference: Appendix A, Subsection M, Paragraph 34a)
- Attachment V List of Deviations Identified in the QA/QC Performed Under Appendix A, Subsection I (Reference: Appendix A, Subsection M, Paragraph 34e)
- Attachment VI Status of Corrective Action Taken During the Reporting Period from 1/1/2012 12/31/2012

 (Reference: Appendix A, Subsection M, Paragraph 34g)
- **Attachment VII –** List of Locations Where Carbon Canister Systems are Used as Control Devices under Subpart FF (Reference: Appendix B, Paragraph 5a)
- Attachment VIII Quarterly Uncontrolled Benzene Quantity and Projected Uncontrolled Benzene Quantity for Reporting Period from 7/1/2011 6/30/2012 (Reference: Appendix B, Paragraph 10a(3))
- Attachment IX BWON Sampling Plan
 (Reference Appendix B, Paragraph 13a(8)) Incorporated by Reference

List of Attachments for CD/LDAR Annual Report FPC TX

- **Attachment X** Laboratory Audit Reports (Reference: Appendix B, Paragraph 13a(6))
- Attachment XI– Measures Taken to Comply with Training Provisions of Appendix B, Paragraph 9
 (Reference: Appendix B, Paragraph 13a(7))
- Attachment XII Summary of BWON Sampling Results Required Under Subparagraph 10a
 (Reference: Appendix B, Paragraph 13a(9))
- **Attachment XIII –** Summary of Results from the LDE Quarterly Trend Analysis (Reference: Appendix C, Paragraph 5)
- **Attachment XIV –** CPI Sampling Results (Reference: Appendix D, Paragraph 1f)



Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

July 12, 2013

Certified Mail: 7011 0110 0000 1782 6885

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of noncompliances with Appendix D, Provision B.3 of the Decree. A hazardous waste drum was stored for three days without an accumulation date in a designated 90 day storage area. The situation was immediately corrected and the cause was determined.

Cause of Violation:

Failure to implement the existing written procedure is the likely cause of the non-compliance. The hazardous waste drum remained in the 90 day storage area without an accumulation date for three days. The accumulation date was entered the same day the problem was discovered.





Remedial Actions Taken to Prevent Reoccurrence:

Disciplinary actions are under evaluation for the personnel involved, and such actions will follow the site's standard progression for disciplinary matters.

Should you have any questions, please contact Mr. David Hill by email at davidhill@ftpc.fpcusa.com or by phone at (361) 987-7442.

Sincerely,

Randy Smith

VP/General Manager

cc: Certified Mail: 7011 0110 0000 1782 7158
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7011 0110 0000 1782 6878 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7011 0110 0000 1782 7721 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400



Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-987-7000



June 27, 2013

Certified Mail: 7011 0110 0000 1782 7080

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of noncompliances with Appendix D, Provision B.3 of the Decree. A hazardous waste drum was stored for one day without an accumulation date in a designated 90 day storage area. The situation was immediately corrected and the cause was determined.

Cause of Violation:

Failure to implement the existing written procedure is the likely cause of the non-compliance. The hazardous waste drum remained in the 90 day storage area without an accumulation date for one day. The accumulation date was entered the same day the problem was discovered.





Remedial Actions Taken to Prevent Reoccurrence:

The drum's accumulation date was entered the day the problem was discovered. Disciplinary actions are under evaluation for the personnel involved, and such actions will follow the site's standard progression for disciplinary matters.

Should you have any questions, please contact Mr. David Hill by email at davidhill@ftpc.fpcusa.com or by phone at (361) 987-7442.

Sincerely,

Randy Smith

VP/General Manager

cc: Certified Mail: 7011 0110 0000 1782 7097
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7011 0110 0000 1782 7103 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7011 0110 0000 1782 7110 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400



AC/AC/EN

13/12 11001892595

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7

June 28, 2013

7 - 12013

Certified Mail: 7011 0110 0000 1783 0820

Air/Toxics & Inspection Coordination Branch 6EN-A

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Paragraph 39 Report for Linear Low Density Polyethylene Plant

Dear Madam and Sirs:

In accordance with Paragraph 29 of Appendix A of the First Amendment of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby submitting the Paragraph 39 Report for the Linear Low Density Polyethylene (LLDPE) Plant. The Covered Process Unit Evaluation was completed in the LLDPE Plant on June 14, 2013.

Over the course of the Evaluation, 106 Valves, 444 Connectors, and 7 Pressure Relief Valves were identified as being in VOC or HAP service but were not included in the LDAR Program. The components were added to the LDAR system and will be monitored as required.

Over the course of the Evaluation, 87 Valves, 239 Connectors, and 2 Pressure Relief Valve were identified as not being in VOC or HAP service, but were included in the LDAR Program. The components were removed from the LDAR system.

Over the course of the Evaluation it was found that 21 Valves and 61 Connectors which are part of the Plant's Closed Vent System (CVS) were not being monitored. According to 40 CFR 63.983(b), as referenced by 40 CFR 63.2450(e), the CVS is required to be monitored for visible, audible, or olfactory indications of leaks annually. According to Special Condition 9 of NSR Air Permit #20203 and PSDTX1224, the capture system for each flare or incinerator (CVS) will be either: inspected monthly by visual, audible, and/or olfactory means; or, monitored by Method 21 annually. The LLDPE Plant has elected to satisfy this condition by annual Method 21 monitoring as well as monthly AVO inspections. To be consistent with this decision, these components were added to the LDAR database, though they are not LDAR regulated components.



I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

R. P. Smith

VP/General Manager

cc: Certified Mail: 7011 0110 0000 1783 0837
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7011 0110 0000 1783 0844 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7011 0110 0000 1783 0851 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400





Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

May 7, 2013

Certified Mail: 7011 0110 0000 1783 4217

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Paragraph 39 Report for Polypropylene II Plant

Dear Madam and Sirs:

In accordance with Paragraph 29 of Appendix A of the First Amendment of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby submitting the Paragraph 39 Report for the Polypropylene II (PP II) Plant. The Covered Process Unit Evaluation was completed in the PP II Plant on April 23, 2013.

Over the course of the Evaluation, 65 Valves, 203 Connectors, and 2 Pressure Relief Valves were identified as being in VOC or HAP service but were not included in the LDAR Program. The components were added to the LDAR system and will be monitored as required.

Over the course of the Evaluation, 15 Valves, 55 Connectors, and 1 Pressure Relief Valve were identified as not being in VOC or HAP service, but were included in the LDAR Program. The components were removed from the LDAR system.

Over the course of the Evaluation it was found that 61 Valves, 310 Connectors, 3 Pumps, and 1 Manway which are in heavy liquid service were being monitored as light liquid. The components are in an organic peroxide service, which is a heavy liquid VOC. To be consistent with the facility practice, the components were removed from the LDAR Method 21 monitoring database. The components will only be monitored in the future through Audio, Visual, Olfactory inspections as required.



I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

R. P. Smith

VP/General Manager

cc: Certified Mail: 7011 0110 0000 1783 4224
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7011 0110 0000 1783 4231 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7011 0110 0000 1783 4248 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400 FAX: (512) 495-6401 AIMIJEN



110018925957

Formosa Plastics Corporation, Texa

201 Formosa Drive • P.O. Box 700

Point Comfort, TX 77978 Telephone: 361-987-7000

RECEIVE

November 25, 2013

Certified Mail: 7011 0110 0000 1783 2190

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

TEC 3 2013

Air/Toxics & Inspection Coordination Branch 6EN-A

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Paragraph 39 Report for Vinyl Chloride Monomer Plant

Dear Madam and Sirs:

In accordance with Paragraph 29 of Appendix A of the First Amendment of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby submitting the Paragraph 39 Report for the Vinyl Chloride Monomer (VCM) Plant. The Covered Process Unit Evaluation was completed in the VCM Plant on November 11, 2013.

Over the course of the Evaluation, 100 Valves, 276 Connectors, and 1 Pressure Relief Valve were identified as being in VOC or HAP service but were not included in the LDAR Program. The components were added to the LDAR system and will be monitored as required.

Over the course of the Evaluation, 177 Valves, 645 Connectors, 2 Pressure Relief Valves, and 2 Pumps were identified as not being in VOC or HAP service, but were included in the LDAR Program. The components were removed from the LDAR system.

I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

R. P. Smith

VP/General Manager





cc: Cert

Certified Mail: 7011 0110 0000 1783 2206 Director, Special Litigation and Projects Division Office of Civil Enforcement Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW (MC 2248-A) Washington, DC 20460

Certified Mail: 7011 0110 0000 1783 2213 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7011 0110 0000 1783 2220 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400



Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700

Point Comfort, TX 77978 Telephone: 361-987-7000

RECEIVE

September 27, 2013

P 30 2013

Certified Mail: 7011 0110 0000 1783 1551

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Air/Toxics & Inspection Coordination Branch 6EN-A

Subject:

Consent Decree between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Sir:

Appendix B, Paragraph 10.a (5) of the Consent Decree lodged in Civil Action 6:09-cv-00061 requires Formosa to submit to EPA an updated Benzene Waste Operations NESHAP Sampling Plan for FPC TX when there are changes in processes, operations, or other factors that lead FPC TX to conclude that the Sampling Plan may no longer provide an accurate basis for estimating FPC TX's quarterly benzene quantity. Although there have been no changes that would cause the Sampling Plan to be providing an inaccurate basis for estimating FPC TX's quarterly benzene quantity, FPC TX is submitting an update to the Sampling Plan, which reflects changes made after a periodic review, for the sake of good order.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Enclosure



Cc: Certified Mail: 7011 0110 0000 1783 1568
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, D.C. 20460

Certified Mail: 7011 0110 0000 1783 1575 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, TX 78701



Benzene Waste Operation NESHAP

Consent Decree BWON Sampling Plan

Formosa Plastics Corporation, Texas (FPC TX)



March 29, 2010 (Original) February 20, 2013 (Rev. 1) September 25, 2013 (Rev. 2)

Consent Decree BWON Sampling Plan Formosa Plastics Corporation, Texas (FPC TX)

Purpose

The Benzene Waste Operations NESHAP (BWON) Sampling Plan was developed for FPC TX to demonstrate compliance with Appendix B, Paragraph 10 of the FPC TX Consent Decree (Civil Action No. 6:09 cv-00061).

This sampling plan is designed to identify the quarterly benzene quantity in uncontrolled benzene waste streams by sampling to demonstrate that the 2 Megagram per year (Mg/yr) Compliance Option limit is not exceeded.

Overview

The Formosa Plastics Corporation facility in Point Comfort, Texas is subject to the requirements of the Benzene Waste Operations National Emission Standards for Hazardous Air Pollutants (NESHAP). The facility has elected to comply with the 2 Mg/yr compliance option.

The Point Comfort facility is owned and operated by Formosa Plastics Corporation. The facility operates 13 process units including two olefins units (Olefins I and II) and one gasoline hydrogenation unit in Point Comfort, Texas. The facility considers the Marine Terminal (Marine Traffic) part of the facility because it is included in the same air permit. The facility produces olefins, linear low-density polyethylene (LLDPE), high-density polyethylene (HDPE), ethylene dichloride, polypropylene (PP), vinyl chloride monomer (VCM) and poly vinyl chloride (PVC). The facility is required to meet BWON standards because the facility generates more than 10 Mg per year of benzene as waste.

Please refer to the previously submitted one-time BWON Review and Verification report for additional information.

Affected BWON Waste Streams

FPC TX shall conduct sampling as described by Appendix B, Paragraph 10 at FPC TX for the purpose of calculating uncontrolled benzene quantities.

The plan shall include, but need not be limited to:

- (i) proposed sampling locations and methods for flow calculations at the "end of line" of uncontrolled benzene waste streams; and
- (ii) all uncontrolled waste streams that count toward the 2 Mg/yr calculation and that contain greater than 0.05 Mg/yr of benzene.

FPC TX will perform periodic sampling of certain streams to ensure FPC TX BWON compliance status. These are not CD required sample locations, but they will be sampled at least once per year to confirm their benzene concentrations.

AYAYEN





February 13, 2014

Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-987-7000

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Certified Mail: 7012 3460 0001 7691 0328

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

F 18 20H

Air/Toxics & Inspection Coordination Branch 6EN-A

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Paragraph 39 Report for Ethylene Dichloride Plant

Dear Madam and Sirs:

In accordance with Paragraph 39 of Appendix A of the First Amendment of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby submitting the Paragraph 39 Report for the Ethylene Dichloride (EDC) Plant. The Covered Process Unit Evaluation was completed in the EDC Plant on January 30, 2014.

Over the course of the Evaluation, 150 Valves, 480 Connectors, and 2 Pumps were identified as being in VOC or HAP service but were not included in the LDAR Program. The components were added to the LDAR system and will be monitored as required.

Over the course of the Evaluation, 20 Valves and 29 Connectors were identified as not being in VOC or HAP service, but were included in the LDAR Program. The components were removed from the LDAR system.

I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

R. P. Smith

VP/General Manager





cc: Certified Mail: 7011 0110 0000 1783 2244
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)

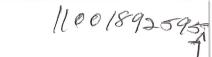
Washington, DC 20460

Certified Mail: 7011 0110 0000 1783 2251 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7012 3460 0001 7691 1547 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701

Telephone: (512) 495-6400







February 13, 2014

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700

Point Comfort, TX 77978

Telephone: 361-987-RECEIVE

Certified Mail: 7012 3460 0001 7691 1554

F 18 2014

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Air/Toxics & Inspection Coordination Branch 6EN-A

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Paragraph 39 Report for Ethylene Glycol Plant

Dear Madam and Sirs:

In accordance with Paragraph 39 of Appendix A of the First Amendment of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby submitting the Paragraph 39 Report for the Ethylene Glycol (EG) Plant. The Covered Process Unit Evaluation was completed in the EG Plant on January 30, 2014.

Over the course of the Evaluation, 59 Valves, 106 Connectors, and 1 PRV were identified as being in VOC or HAP service but were not included in the LDAR Program. The components were added to the LDAR system and will be monitored as required.

Over the course of the Evaluation, 22 Valves, 54 Connectors, and 1 PRV were identified as not being in VOC or HAP service, but were included in the LDAR Program. The components were removed from the LDAR system.

I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

R. P. Smith

VP/General Manager





cc: Certified Mail: 7012 3460 0001 7691 1561
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7012 3460 0001 7691 1578 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7012 3460 0001 7691 1585 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

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January 17, 2014

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

Certified Mail: 7012 3460 0001 7691 0205

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Paragraph 39 Report for High Density Polyethylene II Plant

Dear Madam and Sirs:

In accordance with Paragraph 39 of Appendix A of the First Amendment of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby submitting the Paragraph 39 Report for the High Density Polyethylene II (HDPE II) Plant. The Covered Process Unit Evaluation was completed in the HDPE II Plant on January 7, 2014.

Over the course of the Evaluation, 57 Valves and 108 Connectors were identified as being in VOC or HAP service but were not included in the LDAR Program. The components were added to the LDAR system and will be monitored as required.

Over the course of the Evaluation, 78 Valves and 127 Connectors were identified as not being in VOC or HAP service, but were included in the LDAR Program. The components were removed from the LDAR system.

I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

R. P. Smith

VP/General Manager





cc: Certified Mail: 7012 3460 0001 7691 0212
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7012 3460 0001 7691 0229 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7012 3460 0001 7691 0236 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400 FAX: (512) 495-6401 ailaler 449315 Ul.7



Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

January 22, 2014

Certified Mail: 7012 3460 0001 7691 0274

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Paragraph 39 Report for Polyvinyl Chloride Plant

Dear Madam and Sirs:

In accordance with Paragraph 39 of Appendix A of the First Amendment of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby submitting the Paragraph 39 Report for the Polyvinyl Chloride (PVC) Plant. The Covered Process Unit Evaluation was completed in the PVC Plant on January 14, 2014.

Over the course of the Evaluation, 91 Valves and 177 Connectors were identified as being in VOC or HAP service but were not included in the LDAR Program. The components were added to the LDAR system and will be monitored as required.

Over the course of the Evaluation, 26 Valves and 62 Connectors were identified as not being in VOC or HAP service, but were included in the LDAR Program. The components were removed from the LDAR system.

Over the course of the Evaluation it was found that 120 Valves, 245 Connectors, 9 Pumps, and 1 PRV which are in heavy liquid utility service were being monitored as light liquid. Some of the components are in ethylene glycol service and others are in methylene chloride service. To be consistent with the facility practice, the components were removed from the LDAR Method 21 monitoring database. The components will only be monitored in the future through Audio, Visual, Olfactory inspections as required.

I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

R. P. Smith

VP/General Manager

cc: Certified Mail: 7012 3460 0001 7691 0281
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7012 3460 0001 7691 0298 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7012 3460 0001 7691 0304 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400





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Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-

Certified Mail: 7012 3460 0001 7691 0601

January 31, 2014

Air/Toxics & Inspection

Certified Mail: 7012 3460 000 Fination Branch EPA Region 6 Associate Director, Air Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200

EPA Headquarters Director, Special Litigation and Projects Division Office of Civil Enforcement Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW (MC 2248-A) Washington, DC 20460

> Submittal of Annual Reports Required by Consent Decree Entered on Re: February 3, 2010; Formosa Plastics Corporation, Texas, Formosa Hydrocarbons, Inc., and Formosa Plastics Corporation, Louisiana (Formosa); Civil Action No. 6:09-cv-00061

Dear Madam or Sir:

Dallas, TX 75202

Formosa Plastics

In accordance with Section VI, Paragraph 23 and Appendix A, Subsection M, Paragraphs 34 and 35 of the above-referenced consent decree; Formosa is submitting its Annual Report (for the Period of 07/01/2012 - 06/30/2013) and its Leak Detection and Repair (LDAR) Annual Compliance Status Report (for the Period of 01/01/2013 -12/31/2013). The reports cover Formosa Plastics Corporation, Texas (FPC TX), Formosa Hydrocarbons, Inc. (FHC) and Formosa Plastics Corporation, Louisiana (FPC LA). The referenced consent decree was lodged on 9/29/2009 and was entered on 2/3/2010.

This submittal consists of individual reports for FPC TX, which includes FHC, and FPC LA. Under the terms of the decree, reports are due to EPA by January 31 of the following year.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the





information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Should you have any questions regarding these reports, please contact Grace Chang by email at gchang2@fpcusa.com or by phone at (973)716-7341 or Mary Bachynsky by email at mbachynsky@fpcusa.com or phone at (973) 716-7342.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Attachments

Certification Statement for Formosa Plastics Corporation Texas (FPC TX) and Formosa Hydrocarbons Company, Inc (FHC).

I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify that "LDAR trainings in accordance with this Consent Decree have been done" in FPC TX and FHC per Appendix A, Subsection H, Paragraph 22.

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

List of Attachments for CD/LDAR Annual Report FPC TX

- Attachment I Table of Non-Compliances with the Consent Decree (Reference: Consent Decree Paragraph 23b and Appendix A, Subsection M, Paragraph 34a)
- Attachment II "Valve Technology Survey" Commercial Unavailability of a
 Certified Low-Leaking Valve or Certified Low-Leaking Valve
 Packing Technology
 (Reference: Appendix A, Subsection G, Paragraph 20 and
 Appendix A, Subsection M, Paragraph 34c)
- Attachment III Identification of Any Problems Encountered In Complying with the Requirements of Appendix A
 (Reference: Appendix A, Subsection M, Paragraph 34a)
- Attachment IV List of Deviations Identified in the QA/QC Performed Under Appendix A, Subsection I (Reference: Appendix A, Subsection M, Paragraph 34e)
- Attachment V Status of Corrective Action Taken During the Reporting Period (1/1/2013 12/31/2013)

 (Reference: Appendix A, Subsection M, Paragraph 34g)
- **Attachment VI –** List of Locations Where Carbon Canister Systems Are Used As Control Devices under Subpart FF (Reference: Appendix B, Paragraph 5a)
- Attachment VII Quarterly Uncontrolled Benzene Quantity and Projected Uncontrolled Benzene Quantity for Reporting Period from 7/1/2012 through 6/30/2013

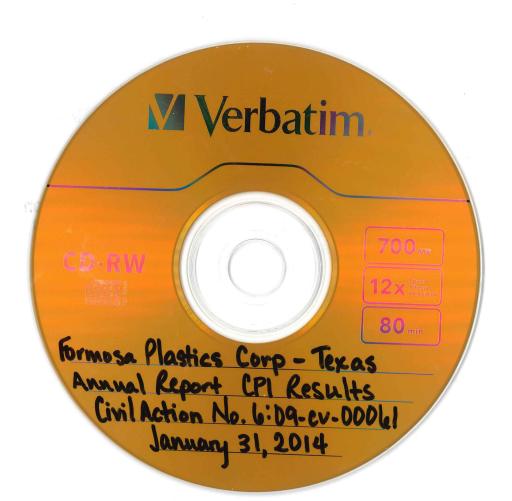
 (Reference: Appendix B, Paragraph 10a(3))
- Attachment VIII BWON Sampling Plan
 (Reference Appendix B, Paragraph 13a(8)) Incorporated by Reference
- Attachment IX- Measures Taken to Comply with Training Provisions of Appendix B, Paragraph 9
 (Reference: Appendix B, Paragraph 13a(7))

List of Attachments for CD/LDAR Annual Report FPC TX

Attachment X – Summary of BWON Sampling Results Required Under Subparagraph 10a (Reference: Appendix B, Paragraph 13a(9))

Attachment XI – Summary of Results from the Quarterly Trend Analysis (Reference: Appendix C, Paragraph 5)

Attachment XII – CPI Sampling Results (Reference: Appendix D, Paragraph 1f)





RECEIVED
US EPA, DALLAS, TX
ASSOCIATE DIRECTOR

110018925957 1417VI

15 DEC 15 PM 5: 06

COMPLIANCE ASSURANCE & ENFORCEMENT DIV. Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

December 10, 2015

Certified Mail: 7015 0640 0006 2456 7289

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of noncompliance with Appendix D, Provision B.3 of the Decree. 1.) A container stored in a 90 day container storage area at SPVC Technical without an accumulation date. This situation was corrected the day it was noted.

Cause of Violation:

1. Technician utilized a Hazardous Waste drum in the 90 day storage area without an accumulation date on the drum on November 24, 2015. The drum was discovered without an accumulation date on November 30, 2015.

Remedial Actions Taken to Prevent Reoccurrence:

1. The accumulation date was confirmed to be November 24, 2015 and a yellow DOT sticker was applied with an accumulation date the day the problem was discovered. Additionally, the Technical Department will be utilizing an electronic tracking system



for hazardous waste storage requirements along with reminders that will have an electronic signature function.

2. Disciplinary actions are under evaluation for the personnel involved, and such actions will follow the site's standard progression for disciplinary matters.

Sincerely,

R. P. Smith

VP/General Manager

cc: Certified Mail: 7015 0640 0006 2456 7296
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7015 0640 0006 2456 7302 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7015 0640 0006 2456 7319 Robert T. Stewart Kelly Hart & Hallman LLP 303 Colorado, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

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Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

RECEIVE

January 30, 2015

Certified Mail: 7012 346

Certified Mail: 7012 3460 0001 7692 3939

FEB 2 - 2015

6EN-A

EPA Region 6 Associate Director, Air Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

EPA Headquarters Director, Special Litigation and Projects Division Office of Civil Enforcement Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW (MC 2248-A) Washington, DC 20460

> Re: Submittal of Annual Reports Required by Consent Decree Entered on February 3, 2010; Formosa Plastics Corporation, Texas, Formosa Hydrocarbons, Inc., and Formosa Plastics Corporation, Louisiana (Formosa); Civil Action No. 6:09-cv-00061

Dear Madam or Sir:

In accordance with Section VI, Paragraph 23 and Appendix A, Subsection M, Paragraphs 34 and 35 of the above-referenced consent decree; Formosa is submitting its Annual Report (for the Period of 07/01/2013 - 06/30/2014) and its Leak Detection and Repair (LDAR) Annual Compliance Status Report (for the Period of 01/01/2014 -12/31/2014). The reports cover Formosa Plastics Corporation, Texas (FPC TX), Formosa Hydrocarbons, Inc. (FHC) and Formosa Plastics Corporation, Louisiana (FPC LA). The referenced consent decree was lodged on 9/29/2009 and was entered on 2/3/2010.

This submittal consists of individual reports for FPC TX, which includes FHC, and FPC LA. Under the terms of the decree, reports are due to EPA by January 31 of the following year.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the



information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Should you have any questions regarding these reports, please contact Grace Chang by email at gchang2@fpcusa.com or by phone at (973)716-7341 or Mary Bachynsky by email at mbachynsky@fpcusa.com or phone at (973) 716-7342.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Attachments

Certification Statement for Formosa Plastics Corporation Texas (FPC TX) and Formosa Hydrocarbons Company, Inc (FHC).

I, Randall P. Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify that "LDAR trainings in accordance with this Consent Decree have been done" in FPC TX and FHC per Appendix A, Subsection H, Paragraph 22.

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

List of Attachments for CD/LDAR Annual Report FPC TX

- Attachment I Table of Non-Compliances with the Consent Decree (Reference: Consent Decree Paragraph 23b and Appendix A, Subsection M, Paragraph 34a)
- Attachment II Findings and Corrective Actions for LDAR Audit, Including Updates to Any Corrective Actions that are Necessary (Reference: Appendix A, Subsection L, Paragraph 33 and Subsection M, Paragraph 34f)
- Attachment III "Valve Technology Survey" Commercial Unavailability of a
 Certified Low-Leaking Valve or Certified Low-Leaking Valve
 Packing Technology
 (Reference: Appendix A, Subsection G, Paragraph 20 and
 Appendix A, Subsection M, Paragraph 34c)
- Attachment IV Identification of Any Problems Encountered In Complying with the Requirements of Appendix A
 (Reference: Appendix A, Subsection M, Paragraph 34a)
- Attachment V List of Deviations Identified in the QA/QC Performed Under Appendix A, Subsection I (Reference: Appendix A, Subsection M, Paragraph 34e)
- Attachment VI Status of Corrective Action Taken During the Reporting Period (1/1/2014 12/31/2014) (Reference: Appendix A, Subsection M, Paragraph 34g)
- Attachment VII List of Locations Where Carbon Canister Systems Are Used As Control Devices under Subpart FF (Reference: Appendix B, Paragraph 5a)
- Attachment VIII Quarterly Uncontrolled Benzene Quantity and Projected Uncontrolled Benzene Quantity for Reporting Period from 7/1/2013 through 6/30/2014 (Reference: Appendix B, Paragraph 10a(3))
- Attachment IX BWON Sampling Plan (Reference Appendix B, Paragraph 13a(8)) Incorporated by Reference

List of Attachments for CD/LDAR Annual Report FPC TX

- **Attachment X –** Laboratory Audit Reports (Reference: Appendix B, Paragraph 13a(6))
- **Attachment XI–** Measures Taken to Comply with Training Provisions of Appendix B, Paragraph 9 (Reference: Appendix B, Paragraph 13a(7))
- Attachment XII Summary of BWON Sampling Results Required Under Subparagraph 10a
 (Reference: Appendix B, Paragraph 13a(9))
- **Attachment XIII** Updated Submittals of the LDE Plans (Reference: Appendix C, Paragraph 2)
- **Attachment XIV –** Summary of Results from the Quarterly Trend Analysis (Reference: Appendix C, Paragraph 5)
- **Attachment XV –** CPI Sampling Results (Reference: Appendix D, Paragraph 1f)

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OLI/OLI









Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-987-7000

RECEIVE

July 22, 2015

JUL 23 2015

Certified Mail: 7015 0640 0006 2456 6084

Am Toxics & Inspection
Coordination Branc
6EN-A

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix D, Provision B.3 of the Decree. A hazardous waste drum was stored for greater than 3 days beyond the accumulation date in a designated Satellite Area. The situation was immediately corrected and the cause was determined.

Cause of Violation:

Failure to implement the existing written procedure is the likely cause of the non-compliance. The hazardous waste drum remained in the satellite area beyond the 3-day limit. The drum was removed from the satellite storage area the same day the problem was discovered.



Remedial Actions Taken to Prevent Reoccurrence:

The drum was removed from the satellite storage area the day the problem was discovered. Disciplinary actions are under evaluation for the personnel involved, and such actions will follow the site's standard progression for disciplinary matters.

Sincerely,

R. P. Smith

VP/General Manager

cc: Certified Mail: 7015 0640 0006 2456 6060
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7015 0640 0006 2456 6077 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7015 0640 0006 2456 6053 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

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TX4171,7



Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-987-7000

June 24, 2015

RECEIVE

JUL 2 - 2015

Certified Mail: 7015 0640 0006 2456 5902

Ain/Toxics & Inspection
Coordination Branc

6EN-A

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200

Subject:

Dallas, TX 75202

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not monitored as required. This situation has been resolved.

Cause of Violation:

On June 12, 2015, FPC TX discovered that one hundred and thirty eight (138) valves associated with EDC storage tank DT-402B were not monitored from 06/2014 to 05/2015.

Corrective Actions Taken:

Upon discovery, the valves were immediately monitored per Method 21 and added to their appropriate monitoring cycles.

Sincerely,

R. P. Smith

VP/General Manager



cc: Certified Mail: 7015 0640 0006 2456 5919
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7015 0640 0006 2456 5926 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7015 0640 0006 2456 5933 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400





ASSOCIATE DIRECTOR

16 FEB - I PM 2: 58

COMPLIANCE ASSURANCE & ENFORCEMENT DIV.

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700

Point Comfort, TX 77978 Telephone: 361-987-7000 Fax: 361-987-2363

January 29, 2016

EPA Region 6

Certified Mail: 7015 0640 0006 2457 1262

Associate Director, Air Toxics and Inspection Coordination Branch (6EN-A)

Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6

1445 Ross Avenue, Suite 1200

Dallas, TX 75202

EPA Headquarters

Certified Mail: 7015 0640 0006 2457 1279

Director, Special Litigation and Projects Division Office of Civil Enforcement Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW (MC 2248-A) Washington, DC 20460

Re:

Submittal of Annual Reports Required by Consent Decree Entered on February 3, 2010; Formosa Plastics Corporation, Texas, Formosa Hydrocarbons, Inc., and Formosa Plastics Corporation, Louisiana (Formosa); Civil Action No. 6:09-cv-00061

Dear Madam or Sir:

In accordance with Section VI, Paragraph 23 and Appendix A, Subsection M, Paragraphs 34 and 35 of the above-referenced consent decree; Formosa is submitting its Annual Report (for the Period of 07/01/2014 - 06/30/2015) and its Leak Detection and Repair (LDAR) Annual Compliance Status Report (for the Period of 01/01/2015 -12/31/2015). The reports cover Formosa Plastics Corporation, Texas (FPC TX), Formosa Hydrocarbons, Inc. (FHC) and Formosa Plastics Corporation, Louisiana (FPC LA). The referenced consent decree was lodged on 9/29/2009 and was entered on 2/3/2010.

This submittal consists of individual reports for FPC TX, which includes FHC, and FPC LA. Under the terms of the decree, reports are due to EPA by January 31 of the following year.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Should you have any questions regarding these reports, please contact Grace Chang by email at gchang2@fpcusa.com or by phone at (973)716-7341 or Mary Bachynsky by email at mbachynsky@fpcusa.com or phone at (973) 716-7342.

Sincerely,

Rick Crabtree

Assistant General Manager

Formosa Plastics Corporation, Texas

Attachments

Certification Statement for Formosa Plastics Corporation Texas (FPC TX) and Formosa Hydrocarbons Company, Inc (FHC).

I, Rick Crabtree, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify that "LDAR trainings in accordance with this Consent Decree have been done" in FPC TX and FHC per Appendix A, Subsection H, Paragraph 22.

Rick Crabtree

Assistant General Manager

List of Attachments for CD/LDAR Annual Report FPC TX

- Attachment I Table of Non-Compliances with the Consent Decree (Reference: Consent Decree Paragraph 23b and Appendix A, Subsection M, Paragraph 34a)
- Attachment II "Valve Technology Survey" Commercial Unavailability of a
 Certified Low-Leaking Valve or Certified Low-Leaking Valve
 Packing Technology
 (Reference: Appendix A, Subsection G, Paragraph 20 and
 Appendix A, Subsection M, Paragraph 34c)
- Attachment III Identification of Any Problems Encountered In Complying with the Requirements of Appendix A
 (Reference: Appendix A, Subsection M, Paragraph 34a)
- Attachment IV List of Deviations Identified in the QA/QC Performed Under Appendix A, Subsection I
 (Reference: Appendix A, Subsection M, Paragraph 34e)
- Attachment V Status of Corrective Action Taken During the Reporting Period from 1/1/2015 through 12/31/2015

 (Reference: Appendix A, Subsection M, Paragraph 34g)
- Attachment VI List of Locations Where Carbon Canister Systems Are
 Used As Control Devices under Subpart FF
 (Reference: Appendix B, Paragraph 5a)
- Attachment VII Quarterly Uncontrolled Benzene Quantity and Projected Uncontrolled Benzene Quantity for Reporting Period from 7/1/2014 through 6/30/2015 (Reference: Appendix B, Paragraph 10a(3))
- Attachment VIII BWON Sampling Plan (Reference Appendix B, Paragraph 13a(8)) Incorporated by Reference
- Attachment IX- Measures Taken to Comply with Training Provisions of Appendix B, Paragraph 9
 (Reference: Appendix B, Paragraph 13a(7))

List of Attachments for CD/LDAR Annual Report FPC TX

Attachment X – Summary of BWON Sampling Results Required Under Subparagraph 10a for Reporting Period from 7/1/2014 through 6/30/2015 (Reference: Appendix B, Paragraph 13a(9))

Attachment XI – Summary of Results from the Quarterly Trend Analysis (Reference: Appendix C, Paragraph 5)

Attachment XII – CPI Sampling Results
(Reference: Appendix D, Paragraph 1f)





Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000 Fax: 361-987-2363

September 29, 2010

Certified Mail: 7008 1830 0000 9431 3728

EPA Region 6

Associate Director, Air Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Re: Consent Decree Civil Action No. 6:09-cv-00061
Appendix A: Enhanced LDAR Program - Initial LDAR Compliance Audits —
Formosa Plastics Corp., Texas, Formosa Plastics Corp., Louisiana, and Formosa Hydrocarbons Company, Inc.

Dears Sir/Madam:

In accordance with the above-referenced action pursuant to Appendix A, subsections J, K and L; enclosed are the Initial Leak Detection and Repair (LDAR) Compliance Audits and Corrective Action Plans for Formosa Plastics Corporation, Texas (FPC TX) and Formosa Plastics Corporation, Louisiana ("FPC LA").

As per Appendix A, Subsection M, paragraph 34.b, Formosa is identifying a problem encountered in complying with the requirement to retain specific records, as stated in Consent Decree paragraph 57b.

Environmental Resource Management ("ERM") of Houston, Texas, an experienced third party LDAR auditor, was retained by Formosa to conduct the required initial LDAR Audit. Despite being provided a copy of Formosa's Consent Decree, ERM failed to preserve specific non-identical records pertaining to the comparative monitoring audit performed by ERM in FPC LA's VCM Unit.

Of the 585 VCM data points monitored during the February 2010 audit within FPC LA's VCM Unit, 69 monitoring event records have not been located by ERM. It is important to note that the 516 records to support the comparative monitoring results identify eight of the eight leaks discovered during the VCM Unit's audit. Thereby, the missing records do not change the outcome. ERM's existing records support that the comparative monitoring ratio of 3.0 was exceeded in FPC LA's VCM Unit; and therefore corrective action is required by Appendix A, Subsection J, paragraph 30.b.



Formosa has initiated corrective actions to ensure that this type of incident does not reoccur.

I, Randy Smith, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Should you have any questions regarding these reports, please contact Richard O. Quinnette III by email at rquinnette@fpcusa.com or by phone at (973)716-7341.

Sincerely,

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Attachments

Certification Statement for Formosa Plastics Corporation, Louisiana (FPC LA)

I, Kelly Serio, certify that

- the Facility is in compliance with all applicable LDAR regulations and this ELP;
- (ii) Defendant(s) has completed all corrective actions, if applicable, or is in the process of completing all required Corrective Action; and
- (iii) all equipment at the Facility that is regulated under a federal, state, or local leak detection and repair program has been identified and included in the Facility's LDAR program.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kelly Serio

Vice President/General Manager Formosa Plastics Corp., Louisiana

Certification Statement for Formosa Plastics Corporation Texas (FPC TX) and Formosa Hydrocarbons Company, Inc (FHC).

I, Randall P. Smith, certify that

- (i) the Facilities are in compliance with all applicable LDAR regulations and this ELP;
- (ii) Defendant(s) has completed all corrective actions, if applicable, or is in the process of completing all required Corrective Action; and
- (iii) all equipment at the Facility that is regulated under a federal, state, or local leak detection and repair program has been identified and included in the Facility's LDAR program.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

cc: EPA Headquarters Certified Mail: 7008 1830 0000 9431 3735

Director, Special Litigation and Projects Division

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

U.S Environmental Protection Agency

1200 Pennsylvania Avenue, NW (MC 2248-A)

Washington, DC 20460

Attachments

Attachment I – Initial LDAR Compliance Report – FPC TX

Attachment II – Corrective Action Plan – FPC TX

Attachment II – Initial LDAR Compliance Report – FPC LA

Attachment IV – Corrective Action Plan – FPC LA



Formosa Plastics Corporation, America

201 Formosa Drive • P.O. Box 700
Point Comfort, TX 77978
Telephone: (361) 987-7000

Fax: (361) 987-2363

RECEIVE

SEP 6 - 2011

ar/Texics & Inspection Coordination Branch

August 31, 2011

Certified Mail: 7008 1830 0000 9417 0154

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On August 17, 2011, FPC TX discovered eleven (11) flanges that had not been added to the LDAR program within one year of the Date of Lodging. While installing new equipment in the area, it was determined that the flanges were in VOC service and must be included in the LDAR program.

Corrective Actions Taken:

Upon discovery, the flanges were entered into the system and monitored per Method 21. The monitoring results showed that the flanges were not leaking.

Sincerely,

R. P. Smith

VP/General Manager



cc: Certified Mail: 7008 1830 0000 9417 0161
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 0178 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 0185 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

Telephone: (512) 495-6400 FAX: (512) 495-6401



Formosa Plastics Corporation, America

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000

Fax: (361) 987-2363

RECEIVE

-ur/Toxics & Inspection cordination Branch RENLA

November 2, 2011

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Certified Mail: 7008 1830 0000 9417 1205

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cy-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facilitywide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On October 19, 2011, FPC TX discovered that 1395 Valves, 6577 Connectors, 24 Pressure Relief Valves, 3 Pumps, and 2 Compressors had not been added to the LDAR program within one year of the Date of Lodging. While conducting inventory work related to the Green House Gas monitoring rules, it was discovered that this equipment was in VOC service and must be included in the LDAR Program. This area of the unit processes natural gas and was previously believed to be below the VOC content requirement for the LDAR regulations.

Corrective Actions Taken:

Upon discovery, the covered equipment was entered into the system and scheduled for monitoring per Method 21.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas

The mps



cc: Certified Mail: 7008 1830 0000 9417 1212
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 1229 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 1236 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400 FAX: (512) 495-6401



Formosa Plastics Corporation, America

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000

Fax: (361) 987-2363

RECEIVE

November 15, 2011

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Air/Toxics & Inspection Coordination Branch

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200

Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Certified Mail: 7008 1830 0000 9417 1120

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that an incorrect internal leak definition was used when conducting Method 21 inspections of connectors. This situation has been resolved.

Cause of Violation:

On November 1, 2011, FPC TX discovered that the FHC (Formosa Hydrocarbons) Unit's affected connectors, which were monitored within 18 months of the Date of Lodging, were actually monitored with an internal leak definition of 500 ppm VOC, rather than 250 ppm due to a misunderstanding of an FHC exception within the applicable Consent Decree Subsection. This discovery indicated that of the approximately 18,000 affected connectors monitored within 18 months of the Date of Lodging, 145 connectors were impacted by the misunderstood leak definition.

Corrective Actions Taken:

The internal leak definition for connectors in FHC is set at 250 ppm, and all subsequent monitoring conducted in 2011 used this definition.

Sincerely,

R. P. Smith

VP/General Manager



cc: Certified Mail: 7008 1830 0000 9417 1137
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 1144 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 1151 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

FAX: (512) 495-6401



Formosa Plastics Corporation, America

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000

Fax: (361) 987-2363

RECEIVE

JAN 9 ^~

Air/Toxics & Inspection Coordination Branch

January 5, 2012

Certified Mail: 7008 1830 000 9417 1441

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On December 19, 2011, FPC TX discovered that 9 Valves and 29 Connectors had not been added to the LDAR program within one year of the Date of Lodging. While conducting routine inventory maintenance activities, it was discovered that this VOC equipment was not in the LDAR program. The affected equipment was not identified by the operating department as being in VOC service when the LDAR tagging was previously completed.

Corrective Actions Taken:

Upon discovery, the covered equipment was added to the LDAR system and monitored as required per Method 21.

Sincerely,

R. P. Smith

VP/General Manager



cc: Certified Mail: 7008 1830 0000 9417 1458
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 1465 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 1885 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400 FAX: (512) 495-6401





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Formosa Plastics Corporation, America

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: (361) 987-780 RECEIVE

February 14, 2012

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Air/Toxics & Inspection Coordination Branch 6EN-A

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Consent Decree Between U.S. Environmental Protection Agency and Formosa Subject:

Civil Action No. 6:09-cy-00061

Certified Mail: 7008 1830 0000 9417 1908

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facilitywide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On January 31, 2012, FPC TX discovered that 35 Valves and 106 Connectors had not been added to the LDAR program within one year of the Date of Lodging. While conducting routine inventory maintenance activities, it was discovered that this VOC equipment was not in the LDAR program. The equipment had been included in the required AVO inspections, and there was no indication of any leaks.

Corrective Actions Taken:

Upon discovery, the covered equipment was added to the LDAR system and monitored as required per Method 21 with no leaks found.

Sincerely,

R. P. Smith

VP/General Manager

cc: Certified Mail: 7008 1830 0000 9417 1915
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 1922 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 1939 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

FAX: (512) 495-6401

110018925957



Formosa Plastics^a April 5, 2012

Certified Mail: 7011 0110 0000 1782 5147

Formosa Plastics Corporation, America

201 Formosa Drive • P.O. Box 700
Point Comfort, TX 77978
Telephone: (361) 987-7000

Fax: (361) 987-2363

RECEIVE

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A)

Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

APR - 9 2012

Air/Toxics & Inspection Coordination Branch

6EN-A

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On March 23, 2012, FPC TX discovered that 46 Valves, 115 Connectors, 1 PRV, and 2 Pumps had not been added to the LDAR program within one year of the Date of Lodging. During the Third-Party LDAR Audit required under Appendix A, Section J, Paragraph 26 of the subject Consent Decree, these components were identified as being in VOC service but were not in the LDAR Program. These missed components will be included in the Audit report that will be submitted at a later date.

On March 26, 2012, FPC TX discovered that 18 Valves and 44 Connectors had not been added to the LDAR program within one year of the Date of Lodging. While conducting routine inventory maintenance activities, it was discovered that this VOC equipment was not in the LDAR program.

Corrective Actions Taken:

Upon discovery, the covered equipment was added to the LDAR system and monitored as required per Method 21.

Sincerely,

R. P. Smith

VP/General Manager





cc: Certified Mail: 7011 0110 0000 1782 5154
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7011 0110 0000 1782 5161 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7011 0110 0000 1782 5178 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

FAX: (512) 495-6401



RECEIVED US EPA, DALLAS, TX ASSOCIATE DIRECTOR

16 MAR -2 AM 5: 36

COMPLIANCE ASSURANCE & ENFORCEMENT DIV. Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

February 26, 2016

Certified Mail: 7015 0640 0006 2457 2191

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of noncompliance with Appendix D, Provision B.3 of the Decree. 1.) A vacuum box of Hazardous Waste did not have an accumulation date. A Hazardous Waste label was on the container since loading. Upon discovery the situation was immediately corrected and the cause was determined.

Cause of Violation:

1. A vacuum box was filled with Hazardous Waste with the proper label. A communication error between inside and outside plant personnel allowed the vacuum box located in a 90 day area to be without an accumulation date.

Remedial Actions Taken to Prevent Reoccurrence:

1. The date was affixed upon confirmation of the "accumulation date" the day the problem was discovered. Disciplinary actions are under evaluation for the personnel involved, and such actions will follow the site's standard progression for disciplinary matters.





Sincerely,

Rick Crabtree

Assistant General Manager Formosa Plastics Corporation, Texas

cc: Certified Mail: 7015 0640 0006 2457 2207
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7015 0640 0006 2457 2214 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7015 0640 0006 2457 2221 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

FAX: (512) 495-6401

KELEIVE



AI/IAI/EN

110018925957

MAY 1 2 2016

Antioxics a inspection Capramation Brand SEN-4

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

May 10, 2016

Certified Mail: 7015 0640 0006 2457 1736

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cy-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not monitored as required. This situation has been resolved.

Cause of Violation:

On May 03, 2016, FPC TX discovered that two (2) valves under insulation associated with Reclaim Compressor GF-330 were not monitored from November 2014 to March 2016.

Corrective Actions Taken:

Upon discovery, the valves were immediately monitored per Method 21 and added to their appropriate monitoring cycles.

Sincerely,

Rick Crabtree

VP/General Manager



Cc:

Certified Mail: 7015 0640 0006 2457 1743
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7015 0640 0006 2457 1750 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7015 0640 0006 2457 1729 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

FAX: (512) 495-6401



17 (UR -3 A) 6:53 CHARLE - L L LA BY Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

February 28, 2017

AI/AI/EN

Certified Mail: 7015 3430 0001 0536 1456

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that a leaking component was not repaired below the leak limit within 15 days. This situation has been resolved.

Cause of Violation:

On February 22, 2017 FPC TX discovered that one flange in the Polypropylene 2 unit was not repaired in 15 days.

Corrective Actions Taken:

Upon discovery, the flange was immediately repaired and remonitored to show the leak was fixed.

Sincerely,

Rick Crabtree

VP/General Manager



Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6

February 28, 2017 Page 2

Cc: Certified Mail: 7015 3430 0001 0536 1494
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7015 3430 0001 0536 1500 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7015 3430 0001 0536 1517 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701

AI/AI/EN 110018925957



RECEIVED US EPA, DALLAS, TX ASSOCIATE RESECTOR

17 MAY 22 PM 2: 12

COMPLIANCE ASSURANCE & ENFORCEMENT DIV.

Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

May 19, 2017

Certified Mail: 7015 3430 0001 0536 2040

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

ATTENTION: SARAH FREY

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not monitored as required. This situation has been resolved.

Cause of Violation:

On May 11, 2017, FPC TX discovered that seven hundred and ninety seven (797) components throughout the Olefins II Plant were not a part of our LDAR program. Initial monitoring showed no leaks for these two hundred and eighty seven (287) valves and five hundred and ten (510) connectors.

Corrective Actions Taken:

Upon discovery, the components were immediately tagged, monitored per Method 21 and added to their appropriate monitoring cycles.

Sincerely,

Rick Crabtree

Vice President/General Manager Formosa Plastics Corporation, Texas





cc: Certified Mail: 7015 3430 0001 0536 2088
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7015 3430 0001 0536 2071 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7015 3430 0001 0536 2064 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701



CFormosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700

17 JUL 12 PH 2: 27 Point Comfort, TX 77978

Telephone: 361-987-7000

COMPLIANCE LENGRANCE & ENFORCEMENT DIV.

July 10, 2017

ALLAN CO

11 0018975 95

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Certified Mail: 7016 2140 0000 8558 4847

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that multiple valves were not monitored in their quarterly timeframe.

Cause of Violation:

On July 1, 2017 FPC TX discovered that one thousand two hundred and thirty nine (1,239) valves in the Olefins II unit did not have monitoring data for their quarterly frequency due to an unexpected site wide shut down on June 24, 2017.

Note: The Olefins II unit was on schedule to be finished with its quarterly components prior to the end of June yet the unexpected outage at the end of the month prevented the normal monitoring schedule from being completed. The majority of the OL II components (14,392 of 15,631 components or 92 percent) were monitored prior to the site wide shut down.

Corrective Actions Taken:

Once unit is at operating pressure components will be monitored. We will submit a follow up to this letter showing when the components were monitored and their leak history.



Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6

July 10, 2017 Page 2

Sincerely,

Rick Crabtree

VP/General Manager

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6

July 10, 2017 Page 2

Cc: Certified Mail: 7016 2140 0000 8558 4854
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7016 2140 0000 8558 4861 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7016 2140 0000 8558 4878 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701

ALIAI/EN 110018925957



17 JUL 24 AM 10:51

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700

Point Comfort, TX 77978
Telephone: 361-987-7000

July 21, 2017

Certified Mail: 7016 2140 0000 8558 4977

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that multiple valves were not monitored in their quarterly timeframe. This is a follow up to our original letter sent on July 10, 2017.

Cause of Violation:

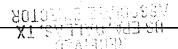
On July 1, 2017 FPC TX discovered that one thousand two hundred thirty nine (1,239) valves in the Olefins II unit did not have monitoring data for their quarterly frequency due to an unexpected site wide shut down on June 24, 2017.

Note: The Olefins II unit was on schedule to be finished with its quarterly components on June 28th yet the unexpected outage at the end of the month prevented the normal monitoring schedule from being completed. The majority of the OL II components (14,392 of 15,631 components or 92 percent) were monitored prior to the site wide shut down.

Corrective Actions Taken:

When the unit was down due to the outage, the third-party LDAR contractors were unable to enter the unit or do any work during that time period. The unit started up on July 8, 2017 and was deemed safe to begin monitoring when our third party contractor returned to work on Monday, July 10, 2017. All components were monitored on or before July 11, 2017 with only three (3) of the missed one thousand two hundred thirty nine (1,239) components found to be leaking. See attached report that shows their leak rate and their repair history.

17 JUL 24 AM 10: 51







July 21, 2017 Page 2

Sincerely,

Rick Crabtree

VP/General Manager

Formosa Plastics Corporation, Texas

Leak History

Formosa

From: 6/25/2017 To: 7/17/2017, All Inspections Under All Rules

									<u>}</u>					`
Equipment:	Tag:	Component Type:	Location Description:	8		edsuj	Inspection:				Repair:	Reins	ReInspection:	
				S S S S S	Date:	Inspector	Instr:	PPM:	BKG:	Date:	Type:	Date:	PPM:	Bkg:
Unit:	OLII			Pro	Process:	AREA-200	0							
6625-JB	86663-N-000	VALVE	2/3 6625-JB 10FT SESD GT S BLW PRV(6120RV-3)	z	7/10/2017	Joshua Gonzales	9063	8369	-	7/10/2017	CLEAN LEAK AREA	7/10/2017	5420	+
6625-JB	86663-N-000	VALVE	2/3 6625-JB 10FT SESD GT S BLW PRV(6120RV-3)							7/13/2017	7/13/2017 TIGHTEN PLUG	7/13/2017	0	0
Unit:	OLII			Pro	Process:	AREA-400	0							
N-6420 FB	140550-000	VALVE	G/4 N-6420FB BLW SWSD GT E RV	z	7/6/2017	Joshua Gonzales	9063	1453	-	7/6/2017	CLEAN LEAK AREA	7/6/2017	1057	-
N-6420 FB	140550-000	VALVE	G/4 N-6420FB BLW SWSD GT E RV							7/10/2017	TIGHTEN VALVE PACKING	7/10/2017	2	-
N-6420 FB	92836-N-000	PRESSURE RELIEF DEVICE	G/5 N-6420 FB SESD PRV(6420RV-9)	z	7/6/2017	Joshua Gonzales	9063	3594	-	7/6/2017	CLEAN LEAK AREA	7/6/2017	2571	7-
N-6420 FB	92836-N-000	PRESSURE RELIEF DEVICE	G/5 N-6420 FB SESD PRV(6420RV-9)							7/13/2017	REPLACED COMPONENT	7/13/2017	4	0

This report was generated using a filter:

Unit is equal to OLII

July 21, 2017 Page 3

Cc: Certified Mail: 7016 2140 0000 8558 4960
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7016 2140 0000 8558 4953 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7016 2140 0000 8558 4946 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701



Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

Fax: 361-987-2363

July 28, 2017

Certified Mail: 7016 2140 0000 8558 3116

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202
ATTENTION: SARAH FREY

Subject: Con

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

This letter serves as a follow-up to the original correspondence dated May 10, 2016, in which a non-compliance with Appendix A was incorrectly described. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On May 03, 2016, FPC TX discovered that two (2) valves under insulation associated with Reclaim Compressor GF-330 were not included in the LDAR program.

Corrective Actions Taken:

Upon discovery, the covered equipment was entered into the system and monitored per Method 21.

Sincerely,

Rick Crabtree

VP/General Manager

Formosa Plastics Corporation, Texas





Cc: Certified Mail: 7016 2140 0000 8558 3123
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7016 2140 0000 8558 3130 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7016 2140 0000 8558 3147 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

FAX: (512) 495-6401

Stephanie Schmidt – Environmental & Sherman Ko – EG Bcc:

Thor Carruthers - EG Jose Bautista – EG

David Tiffin - Environmental Travis Stephens – Environmental



AL/AL/EN 110018925957

17 SEP 14 PM 2:13

& EUFORGEMENT DIV.

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

Fax: 361-987-2363

September 8, 2017

Certified Mail: 7016 2140 0000 8558 3284

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that multiple valves were not monitored in their quarterly timeframe.

Cause of Violation:

On September 6, 2017 FPC TX discovered that thirty two (32) valves did not have monitoring data for their monthly frequency due to a site wide shut down and facility evacuation on August 24, 2017, due to pending landfall of Hurricane Harvey.

The Facility was on schedule to be finished with its monthly components prior to the end of August; Hurricane Harvey's impact prevented the normal monitoring schedule from being completed as units were shut down/idled until after the end of August.

Corrective Actions Taken:

Once the units are at operating pressure components will be monitored. We will submit a follow up to this letter showing when the components were monitored and their leak history.



September 8, 2017

Page 2

Sincerely,

Rick Crabtree

VP/General Manager

Formosa Plastics Corporation, Texas

September 8, 2017 Page 3

Cc: Certified Mail: 7016 2140 0000 8558 3291
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7016 2140 0000 8558 3307 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7016 2140 0000 8558 3314 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701



US EPARTIA TIMECTOR

17 SEP 14 PM 2: 13

17 SEP 14 PM 2: 13

COMPLIANCE MENT DIV.

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978

Telephone: 361-987-7000 Fax: 361-987-2363

September 13, 2017

Certified Mail: 7017 1000 0000 3383 0403

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200

Dallas, TX 75202

ATTN: SARAH FREY

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Force Majeure Event: Hurricane Harvey

Dear Madam and Sirs:

In accordance with Section VIII, Paragraph 43 of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing notice of a Force Majeure event. The proximity of the predicted landfall of Hurricane Harvey to the FPC TX facility resulted in a shutdown and evacuation of the facility beginning on August 24, 2017. A mandatory evacuation of Calhoun County was also issued on August 24, 2017, and was not lifted until September 1, 2017.

FPC TX employees were called back to work beginning on August 30, 2017, as they were able. Plants within the facility were able to begin start-up procedures on September 1, 2017, once power and steam utilities were restored. At this time, there are still plants that have not resumed operation.

As a result of Hurricane Harvey and its subsequent impacts, scheduled monthly LDAR monitoring of thirty-two (32) valves was not completed within the month of August. Notification of these missed components was submitted on September 8, 2017. These inspections will be completed as soon as the plants are operational.

Sincerely,

Rick Crabtree

VP/General Manager

Formosa Plastics Corporation, Texas





cc: Certified Mail: 7017 1000 0000 3383 0410

Director, Special Litigation and Projects Division

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

1200 Pennsylvania Avenue, NW (MC 2248-A)

Washington, DC 20460

Certified Mail: 7017 1000 0000 3383 0427 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7017 1000 0000 3383 0434

Robert T. Stewart

Kelly Hart & Hallman LLP

301 Congress Avenue, Suite 2000

Austin, Texas 78701

Telephone: (512) 495-6400

FAX: (512) 495-6401



17007-3 PM 12: 10

Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700

Point Comfort, TX 77978 Telephone: 361-987-7000 Fax: 361-987-2363

September 26, 2017

Certified Mail: 7017 1000 0000 3383 0021

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200

Dallas, TX 75202 ATTN: Sarah Frey

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that multiple valves were not monitored in their monthly timeframe. This is a follow up to our original letter sent on September 8, 2017.

Cause of Violation:

On September 6, 2017 FPC TX discovered that thirty two (32) valves did not have monitoring data for their monthly frequency due to a site wide shut down and facility evacuation on August 24, 2017, due to pending landfall of Hurricane Harvey.

The Facility was on schedule to be finished with its monthly components prior to the end of August; Hurricane Harvey's impact prevented the normal monitoring schedule from being completed as units were shut down/idled until after the end of August.

Corrective Actions Taken:

The site shutdown on August 24th, 2017. The first process unit on site restarted on 09/01/17. The last process unit on site restarted on 09/24/17. All of the 32 components were monitored within 10 days after restart of their applicable units.





September 26, 2017 Page 2

Sincerely,

Rick Crabtree

VP/General Manager

Formosa Plastics Corporation, Texas

September 26, 2017 Page 3

Cc: Certified Mail: 7017 1000 0000 3383 0052

Director, Special Litigation and Projects Division

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

1200 Pennsylvania Avenue, NW (MC 2248-A)

Washington, DC 20460

Certified Mail: 7017 1000 0000 3383 0045

Chief, Environmental Enforcement Section Environment and Natural Resources Division

U.S. Department of Justice

Box 7611 Ben Franklin Station

Washington, D.C. 20044-7611

Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7017 1000 0000 3383 0038

Robert T. Stewart

Kelly Hart & Hallman LLP

301 Congress Avenue, Suite 2000

Austin, Texas 78701

September 26, 2017

Page 4

Unit	Number of Components	Date of Unit Start Up	Final Monitoring Date
SPVC	25	09/01/2017	09/06/2017
Inland Traffic	1	9/01/2017	09/05/2017
Marine Traffic	1	9/01/2017	09/07/2017
Frac II	2	09/04/2017	09/12/2017
GHU	3	09/14/2017	09/17/2017





Formosa Plastics Corporation, Texas 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

Fax: 361-987-2363

September 29, 2017

Certified Mail: 7017 1000 0000 3383 0090

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202 ATTN: Sarah Frey

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that multiple valves were not monitored in their monthly timeframe. This is a follow up to our original letter sent on September 8, 2017.

Cause of Violation:

On September 6, 2017 FPC TX discovered that thirty two (32) valves did not have monitoring data for their monthly frequency due to a site wide shut down and facility evacuation on August 24, 2017, due to pending landfall of Hurricane Harvey.

The Facility was on schedule to be finished with its monthly components prior to the end of August; Hurricane Harvey's impact prevented the normal monitoring schedule from being completed as units were shut down/idled until after the end of August.

Corrective Actions Taken:

The site shutdown on August 24th, 2017. The first process unit on site restarted on 09/01/17. The last process unit on site restarted on 09/24/17. All of the 32 components were monitored within 10 days after restart of their applicable units and none were found to be leaking.





September 29, 2017 Page 2

Sincerely,

Rick Crabtree

VP/General Manager

Formosa Plastics Corporation, Texas

September 29, 2017 Page 3

Cc: Certified Mail: 7017 1000 0000 3383 0106

Director, Special Litigation and Projects Division

Office of Civil Enforcement

Office of Enforcement and Compliance Assurance

U.S. Environmental Protection Agency

1200 Pennsylvania Avenue, NW (MC 2248-A)

Washington, DC 20460

Certified Mail: 7017 1000 0000 3383 0113

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice

Box 7611 Ben Franklin Station Washington, D.C. 20044-7611

Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7016 2140 0000 8558 3321

Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701

September 29, 2017

Page 4

Unit	Number of Components	Date of Unit Start Up	Final Monitoring Date
SPVC	25	09/01/2017	09/06/2017
Inland Traffic	1	9/01/2017	09/05/2017
Marine Traffic	1	9/01/2017	09/07/2017
Frac II	2	09/04/2017	09/12/2017
GHU	3	09/14/2017	09/17/2017

IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF TEXAS VICTORIA DIVISION

UNITED STATES OF AMERICA,)
Plaintiff,)
) Civil Action No. 6:09-cv-00061
v.)
)
Formosa Plastics Corporation, Texas,)
Formosa Plastics Corporation, Louisiana,)
Formosa Hydrocarbons, Inc.,)
)
Defendants.)
)

FIRST AMENDMENT TO CONSENT DECREE

FIRST AMENDMENT TO CONSENT DECREE

WHEREAS on September 29, 2009, Plaintiff the United States of America ("United States"), on behalf of the Environmental Protection Agency ("EPA"), filed a complaint in this action and contemporaneously lodged a Consent Decree between the United States and Defendants Formosa Plastics Corporation, Texas, Formosa Plastics Corporation, Louisiana, and Formosa Hydrocarbons Corporation;

WHEREAS on February 3, 2010, this Court entered the Consent Decree ("Consent Decree") that fully resolved the claims in the complaint;

WHEREAS the Consent Decree, *inter alia*, requires Formosa Plastics Corporation,

Texas, and Formosa Hydrocarbons Corporation (collectively "FPC TX") to perform

enhancements to the leak detection and repair ("LDAR") programs at their two facilities in Point

Comfort, Texas ("Point Comfort Facilities");

WHEREAS, in 2011, pursuant to the reporting requirements of the Consent Decree, FPC TX notified EPA that FPC TX had failed to include in its LDAR program pieces of equipment from a section of the hydrocarbons process unit that should have been included under applicable regulations;

WHEREAS the Point Comfort Facilities have in excess of 400,000 pieces of LDAR-regulated equipment;

WHEREAS prior to the Lodging of this First Amendment, FPC TX developed a Scope of Work that is attached as Appendix G to this First Amendment;

WHEREAS, FPC TX developed this Scope of Work in order to retain a Third-Party

LDAR contractor (different from its current LDAR services provider) to undertake a

comprehensive review of the piping and instrumentation drawings ("P&IDs") of each process

unit covered by Appendix A of the Consent Decree for the Point Comfort Facilities ("Covered Process Units") and to perform a field verification of the P&IDs and the LDAR database of each Covered Process Unit in order to review the "in service" determination (*i.e.*, " in Volatile Organic Compound ("VOC") service" and/or "in Hazardous Air Pollutant ("HAP") service") of each line and to ensure that all components that are required to be included in the Point Comfort Facilities' LDAR Program are included and all components that are not required to be included are removed from the LDAR database;

WHEREAS the overall process identified in the preceding WHEREAS clause is termed the "Comprehensive First Amendment LDAR Evaluation" and, as described in Appendix G, is intended to be much more detailed and comprehensive than an audit;

WHEREAS the United States and FPC TX (the "Parties to the First Amendment") recognize, and the Court by entering this First Amendment finds, that this First Amendment has been negotiated at arm's length and in good faith, that it will avoid litigation between the Parties to the First Amendment, and that this First Amendment is fair, reasonable, and in the public interest;

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law, and upon the consent and agreement of the Parties, it is hereby ADJUDGED, ORDERED, and DECREED as follows:

* * * *

1. The Consent Decree shall remain in full force and effect in accordance with its terms except that the new Definitions identified below in Paragraph 2 are added to Appendix A of the Consent Decree; the new Paragraphs numbered 37–40 below are added to Appendix A of

the Consent Decree; the new Paragraphs numbered 30A, 32A, 61A, and 61B below are added to the body of the Consent Decree; and new Appendices G and H, attached hereto, are added.

DEFINITIONS TO BE ADDED TO APPENDIX A

2. The definitions in Appendix A are amended with respect to the Point Comfort Facilities to include the definitions set forth in the newly added Appendix G. These new definitions are found in both the "Definitions" section of Appendix G and in other locations in Appendix G.

ADDITIONAL INJUNCTIVE RELIEF TO BE ADDED TO APPENDIX A

- 3. Appendix A is amended to add a new Subsection N which shall have the heading "Subsection N (Additional Injunctive Relief)." The following Paragraphs are added under that new Subsection:
- "37. Comprehensive First Amendment LDAR Evaluation. FPC TX shall implement the Scope of Work set forth in Appendix G at the Point Comfort Facilities. FPC TX shall perform the actions in Appendix G that are assigned to it, shall use its Current LDAR Service Provider to perform the actions required by the Current LDAR Service Provider, and shall retain a Third-Party to perform the actions required by the Third-Party. FPC TX shall be solely responsible for ensuring that the work in Appendix G that must be performed by it, by its Current LDAR Service Provider and the Third-Party is undertaken consistent with Appendix G and in accordance with the schedule set forth in Paragraph 38.
- "38. Schedule for Undertaking the Comprehensive First Amendment LDAR Evaluation.
- a. <u>Commencement</u>. By no later than 60 days after the Date of Lodging of this First Amendment, FPC TX shall commence implementation of the Comprehensive First Amendment LDAR Evaluation set forth in Appendix G.
- b. <u>Completion</u>. FPC TX shall perform the work required at each Covered Process Unit ("Covered Process Unit Evaluation") at the Point Comfort Facilities during the course of the Comprehensive First Amendment LDAR Evaluation with the goal of being comprehensive and thorough. With that goal in mind, FPC TX shall complete the

Comprehensive First Amendment LDAR Evaluation by no later than one year and 60 days after the Date of Lodging, unless, by no later than one year and 15 days after the Date of Lodging, FPC TX seeks approval from EPA Region 6 for an extension of the deadline. In seeking an extension, FPC TX shall provide specific and detailed reasons justifying the additional time. Unexpected costs shall not be a reason for seeking additional time. The request for an extension of time in this Subparagraph is distinct from a request under the *force majeure* provisions (Section VIII) of the Decree. Nothing in this Subparagraph prevents FPC TX from invoking *force majeure*, if applicable, for an extension of the deadline.

- "39. Reports. Consistent with Step 6.2 in Appendix G, by no later than two weeks after completing each Covered Process Unit Evaluation, FPC TX shall submit a report to EPA Region 6 by certified mail that identifies, by Equipment type (i.e., valve, connector, etc.), the number of pieces of Equipment within the Covered Process Unit that have been added to the LDAR program and the number that have been removed. This report shall be called the "Paragraph 39 Report" and each Paragraph 39 Report expressly shall identify that it is being submitted pursuant to Paragraph 39 of Appendix A of the First Amendment. Equipment that has been listed in a Paragraph 39 Report as having been added to the LDAR program will be subject to the stipulated penalties in Subparagraph 32A.b of this First Amendment.
- "40. <u>Certification</u>. By signing this First Amendment, FPC TX certifies that, as of the date of its signature, and other than Equipment that FPC TX already has notified EPA of, it has no knowledge of any piece of Equipment at the Point Comfort Facilities that should be or should have been included in the LDAR Program but currently is not included. If, between the date of its signature and the Date Lodging of this First Amendment, FPC TX becomes aware of any piece of Equipment that should be or should have been included in its LDAR Program but is currently not included, FPC TX shall notify EPA Region 6 by electronic mail as soon as it has any such knowledge. Electronic notice shall be sent to <u>moncrieffe.marcia@epa.gov</u> and <u>gibbs.jennifer@epa.gov</u>."

STIPULATED PENALTIES

4. A new Paragraph is added in Section VII of the body of the Consent Decree as

follows:

"30A. By no later than thirty (30) days after Entry of this First Amendment, FPC TX shall pay a penalty of \$1,447,925 (One Million, Four-Hundred, Forty-Seven Thousand, Nine-Hundred and Twenty Five Dollars) to the United States in consideration of the resolution of liability set forth in Paragraph 61.A of this First Amendment. Payment shall be made as directed in Paragraph 9 of the Consent Decree."

5. New stipulated penalties are added to the first table in Paragraph 32 (*i.e.*, the table for "Noncompliance with Requirements of Enhanced Leak Detection and Repair Program (Appendix A)") as follows:

"32A. FPC TX shall be liable for stipulated penalties to the United States for the violations of this First Amendment set forth below.

Violation	Stipulated Penalty	
32A.a. For failure to timely complete the	Period of Delay	Penalty per Day
Comprehensive First Amendment LDAR		
Evaluation in accordance with the terms of	Days 1 – 30	\$ 1000
Paragraph 37 of this First Amendment and	Days 31 – 60	\$ 2000
Appendix G	Over 60 days	\$ 3000
32A.b. For each piece of Equipment that is	\$175 per piece of misse	d Equipment"
listed in a Paragraph 39 Report that FPC TX		•
failed to include in its LDAR Program that		
should have been included. (This penalty is in		
lieu of the stipulated penalties found in the		
final two rows of the stipulated penalty table		
on pages 13–16 of the main body of the Decree		
that is associated with "Noncompliance with		
Requirements of Enhanced Leak Detection and		
Repair Program (Appendix A)." The final two		
rows in question are located on page 16. For		
any pieces of Equipment other than those listed		
in a Paragraph 39 Report, the final two rows of		
the Table remain in full force and effect.)		

6. Two new paragraphs are added after Paragraph 61 in the body of the Consent

Decree as follows:

"61A. Resolution of Liability. This First Amendment resolves the civil and stipulated penalty claims of the United States for the violations alleged against FPC TX in an EPA letter dated March 23, 2012, and for the violations reported by FPC TX to EPA in an April 5, 2012 letter. EPA's March 23, 2012 letter, the letters from FPC TX to EPA that EPA refers to in its March 23, 2012 letter, and FPC TX's April 5, 2012 letter are set forth in Appendix H of this First Amendment.

"61B. All references in the Consent Decree to Paragraph 61 shall be interpreted to include reference to Paragraph 61A."

SO ORDERED this 13 day of March 2013.

United States District Judge

Through its undersigned representatives, the party below consents to entry of the First Amendment to the Consent Decree, subject to the public notice and comment provisions of 28 C.F.R. § 50.7.

FOR THE UNITED STATES OF AMERICA

/s/ Ignacia S. Moreno
IGNACIA S. MORENO
Assistant Attorney General
Environment and Natural Resources Division
United States Department of Justice

/s/ Annette M. Lang
ANNETTE M. LANG
Environmental Enforcement Section
Environment and Natural Resources Division
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annette.lang@usdoj.gov

KENNETH MAGIDSON United States Attorney Southern District of Texas

By: /s/ Daniel Hu
DANIEL HU
Assistant United States Attorney
Southern District of Texas
Bar Nos: Texas: 10131415
S.D. Texas: 7959
P.O. Box 61129
919 Milam St.
Houston, TX 77208
daniel.hu@usdoj.gov

Through its undersigned representatives, the party below consents to entry of the First Amendment to the Consent Decree, subject to the public notice and comment provisions of 28 C.F.R. § 50.7.

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY

/s/ Cynthia Giles***
CYNTHIA GILES
Assistant Administrator
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency
Washington, DC

*** Signed with permission.

Through its undersigned representatives, the party below consents to entry of the First Amendment to the Consent Decree, subject to the public notice and comment provisions of 28 C.F.R. § 50.7.

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 6

/s/ John Blevins ***
JOHN BLEVINS
Director
Compliance Assurance and
Enforcement Division

/s/ Marcia Elizabeth Moncrieffe ***
MARCIA ELIZABETH MONCRIEFFE
Assistant Regional Counsel
United States Environmental Protection Agency
Region 6
1445 Ross Ave, Suite 1200
Dallas, Texas 75202

*** Signed with permission.

Through its undersigned representative, the parties below consent to entry of the First Amendment to the Consent Decree.

FORMOSA PLASTICS CORPORATION, TEXAS, FORMOSA HYDROCARBONS CORPORATION

/s/ Randall P. Smith ***
RANDALL P. SMITH
Vice President/General Manager
Formosa Plastics Corporation, Texas
Point Comfort, Texas

November 29, 2012 DATE

*** Signed with permission.

EXHIBIT G

Scope of Work to Perform FPC TX's Comprehensive First Amendment LDAR Evaluation

<u>Overall Process</u>: The overall process required by this Scope of Work shall be referred to as the "Comprehensive First Amendment LDAR Evaluation." As applied to a single "Covered Process Unit" (defined below), the process shall be referred to as the "Covered Process Unit Evaluation."

The Third-Party shall evaluate all piping and instrumentation diagrams ("P&IDs") from each Covered Process Unit at the Point Comfort, Texas facilities of Formosa Plastics Corporation, Texas, and Formosa Hydrocarbons Corporation (collectively FPC TX) to verify determinations of "in VOC service" or "not in VOC service" and/or "in organic HAP service" or "not in organic HAP service" as defined in applicable LDAR regulations.

The Third-Party also shall perform field verifications of the P&IDs and FPC TX's database by doing unit-by-unit walk-throughs to ensure that the P&IDs and current LDAR database accurately reflect the components in the field and that the components in the field accurately are reflected on the P&IDs and in the LDAR database. Any component that is in VOC service or in HAP service, as applicable, but not currently in the LDAR program will be added to the LDAR program. Any component that is in the LDAR program but should not be will be removed from the LDAR program.

By no later than two weeks after completion of the Covered Process Unit Evaluation for each Covered Process Unit, FPC TX shall send a report to EPA by certified mail describing the results of the evaluation. "Completion of the Covered Process Unit Evaluation" shall mean when Actions 1 through 5 (below) are complete for that Covered Process Unit. After addition to the LDAR program, such components will be first monitored during the next required periodic monitoring for that type of component in that service.

<u>Purpose of the P&ID Review</u>: The P&ID review portion of the Comprehensive First Amendment LDAR Evaluation Program has been developed in order to systematically challenge and evaluate FPC TX's affected LDAR Equipment determinations beyond:

- FPC TX's 2010 LDAR retagging effort, which relied on previously made historic determinations;
 and.
- The scope of a FPC TX's recent LDAR Audits, which were performed by looking at a statistically random sampling of compliance requirements, assessing compliance based on a "snap shot" approach, and generally not challenging previous, historic determinations made by Operational personnel regarding the regulatory status of Equipment.

Covered Process Units:

The FPC TX process units covered by this Scope of Work are the same as those in a February 2010 Consent Decree between FPC TX and the United States and are:

- 1. PP II
- 2. LLDPE
- 3. VCM
- 4. PVC
- 5. EDC

- 6. FHC
- 7. OL II
- 8. HDPE II
- 9. PP I
- 10. EG
- 11. OL I / PPU / GHU
- 12. Inland Traffic
- 13. Marine Traffic
- 14. HDPE I

Definitions:

<u>"Current LDAR Service Provider"</u> shall mean the firm or company that FPC TX uses for the duration of the work outlined in this Scope of Work to undertake routine, required LDAR functions (including but not limited to monitoring, database entry, instrument calibration, etc), at the Point Comfort, Texas facilities of FPC TX.

"Equipment":

For PEI, PEII, LLDPE, and PPII, affected "Equipment" shall include the following, as defined in Part 63 Subpart UU and as allowed by 63.2535(k): "Each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in regulated material service" (i.e., in HAP or in VOC service).

For VCM, EDC, GHU, EG, Marine Traffic, and affected parts of Inland Traffic, affected "Equipment" shall include the following, as defined in Part 63 Subpart H: "Each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, surge control vessel, bottoms receiver, and instrumentation system in organic hazardous air pollutant service..."

For the affected parts of OLI and OLII, affected "Equipment" shall include the following, as defined in Part 63 Subpart YY: "Each pump, compressor, agitator, pressure relief device, sampling collection system, open-ended valve or line, valve, connector, instrumentation system in organic hazardous air pollutant service..."

For the affected parts of PVC, affected "Equipment" shall include the following, as defined in Part 63 Subpart EEEE: "Each pump, valve, and sampling connection system used in organic liquids service at an OLD operation. Valve types include control, globe, gate, plug, and ball. Relief and check valves are excluded."

For the PVC Unit, affected "Equipment" shall include the following, as defined in Part 61 Subpart V: "Each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, surge control vessel, bottoms receiver in VHAP service..."

For PPI, PPU, FHC, and the affected parts of OLI and OLII, affected "Equipment" shall include the following, as defined in Part 60 Subpart VV: "Each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service..."

"Third-Party" shall mean the company or firm retained by FHC TX to undertake the work required in Actions 2–4 below.

<u>Actions Necessary to Perform the Comprehensive First Amendment LDAR Evaluation for Each</u> Covered Process Unit

Action #1: FPC TX's Pre-Evaluation Assembly - FPC TX Operations shall assemble the following in preparation for each Covered Process Unit Evaluation (Third-Party does not have to perform these actions):

- Step 1.1: Assemble all current color-coded P&IDs associated with the Covered Process Unit, including but not limited to those generated during the 2010 retagging effort. Ensure that the P&IDs are current by reviewing them alongside any process and/or equipment changes since the 2010 retagging effort, using MOC support. Update the color codes on each P&ID as necessary. (Hereafter, these updated, color-coded P&IDs shall be referred to as the "FPC TX First Amendment LDAR P&IDs.")
- Step 1.2: Gather operational data for the speciation of fluids (liquid or gas) contained within or in contact with the affected Equipment, including support for a determination of whether the fluid is potentially equal to or less than 5% wt. HAP or 10% wt VOC.
- Step 1.3: Assemble Equipment-specific process descriptions and CAA regulatory applicability, including any regulatory overlaps, into a regulatory matrix.

Action #2: Third-Party P&ID Review

- Step 2.1: Review Operations' regulatory matrix from Step 1.3 to ensure it is current and accurate (to the extent possible at this Step).
- Step 2.2: Using the FPC TX First Amendment LDAR P&IDs from Step 1.1 and the operational data from Step 1.2, review and confirm the regulatory status of each process stream (e.g., "In VOC service," "In HAP service," "exempt," "nonregulated") in preparation for field verification. Make all necessary changes to reflect the confirmed regulatory status on the FPC TX First Amendment LDAR P&IDs. (Hereafter, both the FPC TX First Amendment LDAR P&IDs that the third-party does *not* need to revise and those that it *does* need to revise shall collectively be called the "3P First Amendment LDAR P&IDs.")
- Step 2.3: Using the 3P First Amendment LDAR P&IDs from Step 2.2, review each P&ID to ensure the P&ID matches the regulatory matrix, including the regulatory status of each line (i.e., process stream). Make all necessary changes to the regulatory matrix.

Action #3: Third-Party Field Verification Process: P&IDs and LDAR Database (dB)

- Step 3.1: Third-Party shall confirm the P&ID page number for each component in the LDAR dB.
- Step 3.2: Third-Party teams (two people each) shall use the 3P First Amendment LDAR P&IDs from Step 2.2 to field verify affected Equipment. "Field verify" includes:
 - a) Compare 3P First Amendment LDAR P&IDs to what is in the field;

- b) Compare what is in field to 3P First Amendment LDAR P&IDs; and,
- c) Compare a) and b) to what is represented in LDAR dB.

Step 3.3: On a daily basis, Third-Party shall identify and summarize data conflicts into initial determinations (e.g., add or remove affected equipment to/from the LDAR dB; update 3P First Amendment LDAR P&IDs, etc.).

Action #4: Third-Party & FPC TX: Review Initial Evaluation Findings, Make Final Determinations and Hold Progress Meetings

Step 4.1: On at least a weekly basis, in a meeting with FPC TX Operations and LDAR Coordinator, Third-Party shall review data conflicts from Step 3.3 and then finalize determinations. All necessary changes to the 3P First Amendment LDAR P&IDs, and regulatory matrix shall be made by the Third Party and all the necessary changes to the LDAR dB shall be made by the Current LDAR Services Provider, including adding new components and removing components that no longer are in service.

Step 4.2: Third-Party shall meet with FPC TX LDAR Coordinator at least every other week to discuss progress and schedule.

Action #5: If necessary: FPC TX or Current LDAR Services Provider Prepare dB/Log Sheet and Install LDAR Identification Tags for any New Components Found; Get New Components into LDAR Database for Monitoring

Step 5.1: FPC TX or its Current LDAR Services Provider shall populate a database/log sheet for each piece of affected Equipment that needs to be added to the LDAR dB. Data elements necessary for finding and monitoring regulated components include but are not limited to (Third-Party does not have to perform these actions):

- Unit
- Process Area
- Equipment
- Tag Number
- Component Type (e.g. valve, pressure relief device, etc.)
- Size
- Service Type
- Applicable Rule (if overlap; determine which supersedes)
- Location Description
- Accessibility (difficult to monitor? unsafe to monitor?)
- Process Stream Identification
- Process and instrumentation drawing (P&ID) Number
- Safety equipment necessary to perform inspections

In addition, in the LDAR dB, a note should be added that states the date when the Equipment was put in service and the fact (including date) that the Equipment was discovered under this Comprehensive First Amendment LDAR Evaluation Program.

Step 5.2: Begin monitoring newly affected Equipment at the next required monitoring period at the monitoring frequency and leak definition level specified in either the February 2010 Consent Decree or the appropriate LDAR regulation (whichever is applicable) for that type of component.

Action #6: FPC TX: Submit Reports to EPA

Step 6.1: FPC TX LDAR Coordinator shall maintain a record of the start and end dates for each Covered Process Unit Evaluation and other data associated with the Evaluations.

Step 6.2: By no later than two weeks after the completion of each Covered Process Unit Evaluation (i.e., completion of Actions 1 through 5), FPC TX shall submit a report that identifies all Equipment added to the LDAR program, all Equipment removed from the LDAR program, and all other material modifications to the LDAR database to EPA by certified mail. FPC TX shall certify each report it submits pursuant to the requirements of Paragraph 27 of the February 2010 Consent Decree.

EXHIBIT H



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

March 23, 2012

CERTIFIED MAIL - RETURN RECEIPT REQUESTED: 7010 2780 0002 4357 3902

Formosa Plastics Corporation, Texas 201 Formosa Drive Point Comfort, TX 77978 Attn: Plant Manager

Formosa Hydrocarbons Company, Inc. P.O. Box 769 103 Fannin Road Point Comfort, TX 77978

Robert T. Stewart Kelly Hart & Hallman, LP 301 Congress Avenue, Suite 2000 Austin, TX 78701

Re:

United States v. Formosa Plastics Corporation, Texas, et al.

Civil Action No. 6:09-cv-00061

DEMAND FOR STIPULATED PENALTIES

Dear Sir or Madam:

Pursuant to Paragraph 30 of the Consent Decree (Consent Decree) entered in the above-referenced matter, the United States Environmental Protection Agency (EPA) hereby demands payment from Formosa Plastics Corporation, Texas and Formosa Hydrocarbons, Inc. of stipulated penalties for violations of certain requirements of the Consent Decree. These violations involve Formosa Plastics Corporation, Texas, and Formosa Hydrocarbons, Inc. located in Point Comfort, Texas (Formosa). See Consent Decree at ¶ 30.

The Consent Decree requires Formosa to undertake enhancements to the Leak Detection and Repair (LDAR) program. See id., Appendix A. Under Paragraph 32 of the Consent Decree, Formosa is liable for stipulated penalties of \$175 for each component that Formosa failed to timely include in its LDAR program. To date, Formosa has failed to timely include 8,191 components. Under Paragraph 32 of the Consent Decree, Formosa is also liable for stipulated penalties of \$100 per piece of equipment when the proper leak definition is not implemented within the required time frame. To date, Formosa has failed to monitor 145 connectors at the required leak definition of 250 ppm VOC. Under the terms of the Consent Decree, as described below, the total amount of stipulated penalties due is \$1,447,925. The EPA, therefore, makes a demand for \$1,447,925.

> Internet Address (URL) . http://www.epa.gov Recycled/Recyclable • Printed with Vegetable Oil Based Inks on Recycled Paper (Minimum 25% Postconsum

2

Re: Formosa Plastics Corporation

Demand for Stipulated Penalties

Stipulated Penalties as Calculated under the Terms of the Decree: Paragraph 32 Penalties

Failure to add existing Covered Equipment to the LDAR Program. Appendix A, Subsection J of this Consent Decree required Formosa to complete an initial LDAR audit of the Point Comfort facility by no later than April 29, 2010. Formosa retained ERM Consulting to conduct the audit and it was completed in a timely manner. The third party audit report notes that, of approximately 5,000 components that were visually inspected during the audit, 104 components were observed that were untagged and that Formosa confirmed had not been included in the LDAR program. Formosa's corrective action was to re-survey the facility to identify, tag, document and monitor fugitive piping components in light liquid or gas/vapor service in accordance with the facility's LDAR program. Formosa also conducted an audit of analyzer tags in NSPS VV service, and included any equipment that was untagged in its LDAR program. Mr. Randy White certified in the September 29, 2010, submittal that "all equipment at the Facility that is regulated under a federal, state, or local leak detection and repair program has been identified and included in the Facility's LDAR program." These components are not the subject of this stipulated penalty demand.

After the initial audit, however, in correspondence dated August 31, 2011, November 2, 2011, January 5, 2012, and February 14, 2012, Formosa reported that it discovered that 8,191 components had not been added to the LDAR program within one year of the Date of Lodging as follows:

No. of Components	Source of Information
11 flanges	Formosa's letter dated August 31, 2011
1,439 valves	Formosa's letters dated November 2, 2011, January 5, 2012, and February 14, 2012
6,712 connectors	Formosa's letters dated November 2, 2011, January 5, 2012, and February 14, 2012
3 pumps	Formosa's letter dated November 2, 2011
24 pressure relief valves	Formosa's letter dated November 2, 2011
2 compressors	Formosa's letter dated November 2, 2011

TOTAL: 8,191 components

3

Re: Formosa Plastics Corporation

Demand for Stipulated Penalties

Paragraph 32 of the Consent Decree states that "For failure to add existing Covered Equipment to the LDAR Program pursuant to Appendix A... if Defendant determines (either on its own or through a third-party audit) that it has, by no later than one year after the Date of Lodging, failed to include any Existing Covered Equipment in its LDAR program, Defendant shall pay \$175 per piece of Covered Equipment that it failed to include." Formosa did not timely include 8,191 components in its LDAR program, and is liable for stipulated penalties of \$1,433,425 (8,191 x \$175).

Failure to Implement Internal Leak Definitions. Appendix A, Subsection C of this Consent Decree required Formosa to implement a leak definition for connectors in the Formosa Hydrocarbons unit by no later than 18 months after Date of Lodging. The Date of Lodging was September 29, 2009, and, therefore, the lower leak definition should have been implemented by March 29, 2011. Seven months later, on November 1, 2011, Formosa discovered that the Formosa Hydrocarbons Unit's affected connectors, which were monitored within 18 months of the Date of Lodging, were actually monitored with an internal leak definition of 500 ppm VOC, rather than 250 ppm due to a misunderstanding of a Formosa Hydrocarbons exception within the CD. Of the approximately 18,000 affected connectors monitored within 18 months of the Date of Lodging, 145 connectors were impacted by the misunderstood leak definition for the seven month period.

In correspondence dated November 15, 2011, Formosa reported that it failed to monitor 145 connectors at the required leak definition of 250 ppm VOC. Paragraph 32 states that "For failure to implement the internal leak definitions as required in Appendix A, Subsection C, paragraph 4," Formosa is required to pay stipulated penalties of "\$100 per component, but not greater than \$25,000 per month per Covered Process Unit." Formosa did not monitor the 145 connectors at the required leak definition of 250 ppm VOC for a period of seven months, and is liable for a substantial stipulated penalty. However, in this one instance, EPA has decided to demand a one-time stipulated penalty in the amount of \$14,500 (145 x \$100), based on the regulatory requirement of annual monitoring of connectors as stated in Appendix A, Subsection D of the CD.

Under Paragraph 39, payment of \$1,447,925 must be made in accordance with the provisions of Paragraph 9 of the Consent Decree, which in turn requires the U.S. Attorney's Office for the Southern District of Texas to issue EFT instructions to Formosa for payment of \$1,447,925. Under Paragraph 35 of the Consent Decree, Formosa must pay these stipulated penalties within 30 days of receiving this written demand unless it invokes the dispute resolution provisions of the Decree.

The EPA is not aware of any basis upon which Formosa may successfully defend the demand made in this letter. EPA, therefore, also requests Formosa to notify the EPA as soon as possible, but no later than 30 days after its receipt of this letter, if it does not intend to invoke dispute resolution. Upon receipt of that notice, EPA will have the U.S. Attorney's Office prepare the EFT instructions and will arrange to provide these instructions to Formosa.

4

Re: Formosa Plastics Corporation

Demand for Stipulated Penalties

Thank you for your prompt attention to this matter.

Sincerely,

John Blevins Director

Compliance Assurance and Enforcement Division

cc: Scott M. Cernich, Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Ben Franklin Station
Washington, DC 20044-7611

Bernadette M. Rappold, Director Special Litigation and Projects Division Office of Civil Enforcement Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW (MC 2248-A) Washington, DC 20460 AVAIVEN

Noc1892545



Formosa Plastics Corporation, America 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000 Fax: (361) 987-2363

RECEIVE

August 31, 2011

SEP 5 - 7011

or/Texics & Inspection Contdination Branch REN.A

Certified Mail: 7008 1830 0000 9417 0154

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On August 17, 2011, FPC TX discovered eleven (11) flanges that had not been added to the LDAR program within one year of the Date of Lodging. While installing new equipment in the area, it was determined that the flanges were in VOC service and must be included in the LDAR program.

Corrective Actions Taken:

Upon discovery, the flanges were entered into the system and monitored per Method 21. The monitoring results showed that the flanges were not leaking.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas





August 31, 2011 Page 2

ce: Certified Mail: 7008 1830 0000 9417 0161
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 0178 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 0185 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400 FAX: (512) 495-6401

Cernich, Josh

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Formosa Plastics Corporation, America 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000 Fax: (361) 987-2363

November 2, 2011

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Certified Mail: 7008 1830 0000 9417 1205	-	VRON-ENT
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	15	252
Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A)		35
Compliance Assurance and Enforcement Division	P12	
U.S. Environmental Protection Agency, Region 6		<u> </u>
1445 Ross Avenue, Suite 1200	W	OR NE
Dallas, TX 75202		

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On October 19, 2011, FPC TX discovered that 1395 Valves, 6577 Connectors, 24 Pressure Relief Valves, 3 Pumps, and 2 Compressors had not been added to the LDAR program within one year of the Date of Lodging. While conducting inventory work related to the Green House Gas monitoring rules, it was discovered that this equipment was in VOC service and must be included in the LDAR Program. This area of the unit processes natural gas and was previously believed to be below the VOC content requirement for the LDAR regulations.

Corrective Actions Taken:

Upon discovery, the covered equipment was entered into the system and scheduled for monitoring per Method 21.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas

Corr. 90-5-2-1-08995

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November 2, 2011 Page 2

cc:

Certified Mail: 7008 1830 0000 9417 1212
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 1229
Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 1236 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400 FAX: (512) 495-6401 AI AI/EN

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Formosa Plastics Corporation, America

201 Formosa Orive • P.O. Box 700 Point Comfort, TX 77978

Telephone: (361) 987-7000 Fax: (361) 987-2363

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November 15, 2011

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Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Certified Mail: 7008 1830 0000 9417 1120

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that an incorrect internal leak definition was used when conducting Method 21 inspections of connectors. This situation has been resolved.

Cause of Violation:

On November 1, 2011, FPC TX discovered that the FHC (Formosa Hydrocarbons) Unit's affected connectors, which were monitored within 18 months of the Date of Lodging, were actually monitored with an internal leak definition of 500 ppm VOC, rather than 250 ppm due to a misunderstanding of an FHC exception within the applicable Consent Decree Subsection. This discovery indicated that of the approximately 18,000 affected connectors monitored within 18 months of the Date of Lodging, 145 connectors were impacted by the misunderstood leak definition.

Corrective Actions Taken:

The internal leak definition for connectors in FHC is set at 250 ppm, and all subsequent monitoring conducted in 2011 used this definition.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas





November 15, 2011 Page 2

cc: Certified Mail: 7008 1830 0000 9417 1137
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 1144
Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 1151 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400 FAX: (512) 495-6401 A // I/EN

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Formosa Plastics Corporation, America 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000

Fax: (361) 987-2363

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January 5, 2012

Certified Mail: 7008 1830 000 9417 1441

Mr/Texics & Inspection Coordination Breach SEN-A

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202

Subject:

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-ev-00061

Dear Madam and Sirs:

In accordance with Section VI. Paragraph 23,b, of the subject Consent Decree, Formosa Plastics Corporation. Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On December 19, 2011, FPC TX discovered that 9 Valves and 29 Connectors had not been added to the LDAR program within one year of the Date of Lodging. While conducting routine inventory maintenance activities, it was discovered that this VOC equipment was not in the LDAR program. The affected equipment was not identified by the operating department as being in VOC service when the LDAR tagging was previously completed.

Corrective Actions Taken:

Upon discovery, the covered equipment was added to the LDAR system and monitored as required per Method 21.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas



January 5, 2012 Page 2

ce: Certified Mail: 7008 1830 0000 9417 1458
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 1465 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 1885 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400

FAX: (512) 495-6401



Cernich, Scott

Formosa Plastics Corporation, America 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000 Fax: (361) 987-2363

February 14, 2012

Certified Mail: 7008 1830 0000 9417 1908

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A)
Compliance Assurance and Enforcement Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202

Subject: Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-cv-00061

Dear Madam and Sirs:

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On January 31, 2012, FPC TX discovered that 35 Valves and 106 Connectors had not been added to the LDAR program within one year of the Date of Lodging. While conducting routine inventory maintenance activities, it was discovered that this VOC equipment was not in the LDAR program. The equipment had been included in the required AVO inspections, and there was no indication of any leaks.

Corrective Actions Taken:

Upon discovery, the covered equipment was added to the LDAR system and monitored as required per Method 21 with no leaks found.

Sincerely,

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas

Con. 90-5-2-1-08995





February 14, 2012 Page 2

cc:

Certified Mail: 7008 1830 0000 9417 1915
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7008 1830 0000 9417 1922 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7008 1830 0000 9417 1939 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-6400 FAX: (512) 495-6401 ハソナソエハ

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Formosa Plastics

April 5, 2012

Formosa Plastics Corporation, Ameri 201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000

Fax: (361) 987-2363

RECEN

Associate Director, Air/Toxics and Inspection Coordination Branch (6EN-A) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200

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6EM-A

Toxics & Ins

Subject

Consent Decree Between U.S. Environmental Protection Agency and Formosa

Civil Action No. 6:09-ev-00061

Certified Mail: 7011 0110 0000 1782 5147

Dear Madam and Sirs:

Dallas, TX 75202

In accordance with Section VI, Paragraph 23.b. of the subject Consent Decree, Formosa Plastics Corporation, Texas is hereby providing timely notice of a noncompliance with Appendix A of the Decree. It was discovered that Existing Covered Equipment was not included in the facility-wide Leak Detection and Repair (LDAR) program. This situation has been resolved.

Cause of Violation:

On March 23, 2012, FPC TX discovered that 46 Valves, 115 Connectors, 1 PRV, and 2 Pumps had not been added to the LDAR program within one year of the Date of Lodging. During the Third-Party LDAR Audit required under Appendix A, Section J, Paragraph 26 of the subject Consent Decree, these components were identified as being in VOC service but were not in the LDAR Program. These missed components will be included in the Audit report that will be submitted at a later date.

On March 26, 2012, FPC TX discovered that 18 Valves and 44 Connectors had not been added to the LDAR program within one year of the Date of Lodging. While conducting routine inventory maintenance activities, it was discovered that this VOC equipment was not in the LDAR program.

Corrective Actions Taken:

Upon discovery, the covered equipment was added to the LDAR system and monitored as required per Method 21.

Sincerely.

R. P. Smith

VP/General Manager

Formosa Plastics Corporation, Texas





(G. Aprixo). 9 ENCCEDE April 5, 2012 Page 2

cc: Certified Mail: 7011 0110 0000 1782 5154
Director, Special Litigation and Projects Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (MC 2248-A)
Washington, DC 20460

Certified Mail: 7011 0110 0000 1782 5161 Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-08995

Certified Mail: 7011 0110 0000 1782 5178 Robert T. Stewart Kelly Hart & Hallman LLP 301 Congress Avenue, Suite 2000 Austin, Texas 78701 Telephone: (512) 495-64(0) FAX: (512) 495-6401